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OF
MENTAL SCIENCE.

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VOL. LXI.



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MDCCCXV.

" In adopting our title of the *Journal of Mental Science*, published by authority of the *Medico-Psychological Association*, we profess that we cultivate in our pages mental science of a particular kind, namely, such mental science as appertains to medical men who are engaged in the treatment of the insane. But it has been objected that the term mental science is inapplicable, and that the term mental physiology or mental pathology, or psychology, or psychiatry (a term much affected by our German brethren), would have been more correct and appropriate; and that, moreover, we do not deal in mental science, which is properly the sphere of the aspiring metaphysical intellect. If mental science is strictly synonymous with metaphysics, these objections are certainly valid; for although we do not eschew metaphysical discussion, the aim of this JOURNAL is certainly bent upon more attainable objects than the pursuit of those recondite inquiries which have occupied the most ambitious intellects from the time of Plato to the present, with so much labour and so little result. But while we admit that metaphysics may be called one department of mental science, we maintain that mental physiology and mental pathology are also mental science under a different aspect. While metaphysics may be called speculative mental science, mental physiology and pathology, with their vast range of inquiry into insanity, education, crime, and all things which tend to preserve mental health, or to produce mental disease, are not less questions of mental science in its practical, that is in its sociological point of view. If it were not unjust to high mathematics to compare it in any way with abstruse metaphysics, it would illustrate our meaning to say that our practical mental science would fairly bear the same relation to the mental science of the metaphysicians as applied mathematics bears to the pure science. In both instances the aim of the pure science is the attainment of abstract truth; its utility, however, frequently going no further than to serve as a gymnasium for the intellect. In both instances the mixed science aims at, and, to a certain extent, attains immediate practical results of the greatest utility to the welfare of mankind; we therefore maintain that our JOURNAL is not inaptly called the *Journal of Mental Science*, although the science may only attempt to deal with sociological and medical inquiries, relating either to the preservation of the health of the mind or to the amelioration or cure of its diseases; and although not soaring to the height of abstruse metaphysics, we only aim at such metaphysical knowledge as may be available to our purposes, as the mechanician uses the formularies of mathematics. This is our view of the kind of mental science which physicians engaged in the grave responsibility of caring for the mental health of their fellow-men may, in all modesty, pretend to cultivate; and while we cannot doubt that all additions to our certain knowledge in the speculative department of the science will be great gain, the necessities of duty and of danger must ever compel us to pursue that knowledge which is to be obtained in the practical departments of science with the earnestness of real workmen. The captain of a ship would be none the worse for being well acquainted with the higher branches of astronomical science, but it is the practical part of that science as it is applicable to navigation which he is compelled to study."—*Sir J. C. Bucknill, M.D., F.R.S.*

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 1913. James Chambers, M.A., M.D.R.U.I., The Priory, Roehampton, S.W.
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 1881. Benedikt, Prof. M., Franciskaner Platz 5, Vienna.
 1907. Bianchi, Prof. Leonardo, Manicomio Provinciale di Napoli. (*Corr. Mem.*, 1896.)
 1900. Blumer, G. Alder, M.D., L.R.C.P. Edin., Butler Hospital, Providence, U.S.A. (*Ord. Mem.*, 1890.)
 1900. Bresler, Johannes, M.D., Oberarzt, Lüben in Schlesien, Germany. (*Corr. Mem.* 1896.)
 1881. Brosius, Dr.,
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 1902. Coupland, Sidney, M.D., F.R.C.P. Lond., Commissioner in Lunacy, 16, Queen Anne Street, Cavendish Square, London, W.
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 1911. Donkin, Sir Horatio Bryan, M.A., M.D. Oxon., F.R.C.P. Lond. (*Medical Adviser to Prison Commissioners and Director of Convict Prisons*), 28, Hyde Park Street, W.

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 1910. Trevor, Arthur Hill, B.A.Oxon., of the Inner Temple, Barrister at Law, Commissioner in Lunacy, 4, Albemarle Street, London, W.

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 1886. Parant, M. Victor, M.D., Toulouse.
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1898. Anderson, John Sewell, M.R.C.S., L.R.C.P.Lond., Senior Assistant Medical Officer, Hull City Asylum, Willerby, near Hull.
1912. Annandale, James Scott, M.B., Ch.B.Edin., Second Assistant Physician, Aberdeen Royal Asylum.
1912. Apthorp, Frederick William, M.R.C.S.Eng., L.R.C.P.Edin., M.P.C., Senior Medical Officer, St. George's Retreat, Ravensworth, Burgess Hill.
1904. Archdale, Mervyn Alex., M.B., B.S.Durh., Medical Superintendent, East Riding Asylum, Beverley, Yorks.
1905. Archdall, Mervyn Thomas, L.R.C.P.&S.Edin., L.S.A.Lond., Brynn-y-Nenadd Hall, Llanfairfechan, N. Wales.
1882. Armstrong-Jones, Robert, M.D.Lond., B.S., F.R.C.P., F.R.C.S.Eng., Medical Superintendent, London County Asylum, Claybury, Woodford, Essex. (*Gen. Secretary from 1897 to 1906.*) (PRESIDENT 1906-7.)
1910. Auden, G. A., M.A., M.D., B.C., D.P.H.Cantab., M.R.C.P.Lond., F.S.A., Medical Superintendent, Educational Offices, Edmund Street, Birmingham.
1891. Aveline, Henry T. S., M.D.Durh., M.R.C.S., L.R.C.P.Lond., M.P.C., Medical Superintendent, County Asylum, Cotford, near Taunton, Somerset. (*Hon. Sec. for S.W. Division, 1905-11.*)
1911. Babington, Alice E. May, M.B., Ch.B.Edin., West Riding Asylum, Wakefield.
1903. Bailey, William Henry, M.D.Lond., M.R.C.S.Eng., L.S.A.Lond., D.P.H., Featherstone Hall, Southall, Midd.
1894. Baily, Percy J., M.B., C.M.Edin., Medical Superintendent, London County Asylum, Hanwell, W.
1909. Bain, John, M.A., M.B., B.Ch.Glasg., Assistant Medical Officer, Northampton County Asylum, Berrywood.
1913. Bainbridge, Charles Frederick, M.B., Ch.B.Edin., Assistant Medical Officer, Devon County Asylum, Exminster.

1906. Baird, Harvey, M.D., Ch.B.Edin., Periteau, Winchelsea, Sussex.
1878. Baker, H. Morton, M.B., C.M.Edin., 7, Belsize Square, London, N.W.
1888. Baker, John, M.D., C.M.Aberd., Medical Superintendent, State Asylum, Broadmoor, Berks.
1904. Barham, Guy Foster, M.A., M.D., B.C.Cantab., M.R.C.S., L.R.C.P.Lond., Senior Assistant Medical Officer, London County Asylum, Long-Grove, Epsom.
1913. Barkley, James Morgan, M.B., Ch.B.Edin., Senior Medical Officer, Brace Bridge Asylum, Lincolnshire.
1910. Bartlett, George Norton, M.B., B.S.Lond., M.R.C.S., L.R.C.P.Lond., Medical Superintendent, City Asylum, Exeter.
1904. Barton, Samuel J., M.D., M.Ch.Dubl., Physician to the Norfolk and Norwich Hospital, Surrey Street, Norwich.
1901. Baskin, J. Loughhead, M.D.Brux., L.R.C.P.&S.Edin., L.R.F.P.S.Glas., Llangarran, Salisbury.
1902. Baugh, Leonard D. H., M.B., Ch.B.Edin., The Pleasaunce, York.
1893. Bayley, Joseph Herbert, M.B., C.M.Edin., L.R.C.P.Lond., 11, The Mount, Caversham, Reading.
1874. Beach, Fletcher, M.B., F.R.C.P.Lond., formerly Medical Superintendent, Darent Asylum, Dartford; Stresa, Downs Road, Coulsdon, Surrey. (*Secretary Parliamentary Committee, 1896-1906. General Secretary, 1899-1896. PRESIDENT, 1900.*)
1892. Beadles, Cecil F., M.R.C.S., L.R.C.P.Lond., The Clergy House, Englefield Green, Surrey.
1902. Beale-Browne, Thomas Richard, M.R.C.S.Eng., L.R.C.P.Lond., Medical Staff, South Nigeria, West Africa.
1913. Bedford, Percy William Page, M.B., Ch.B.Edin., County Asylum, Lancaster.
1909. Beeley, Arthur, M.Sc.Leeds, M.D., B.S.Lond., M.R.C.S., L.R.C.P.Lond., D.P.H.Camb. (*Assistant Medical Officer, E. Sussex Educational Committee*), Windybank, Kingston Road, Lewis.
1914. Bennett, James Wodderspoon, M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, County Mental Hospital, Stafford.
1912. Benson, Henry Porter D'Arcy, M.D., C.M.Edin., M.R.C.P., F.R.C.S. Edin., Medical Superintendent, Farnham House, Finglas, Dublin.
1914. Benson, John Robinson, F.R.C.S.Eng., L.R.C.P.Lond., Resident Physician and Proprietor, Fiddington House, Market Lavington, Wilts.
1899. Beresford, Edwyn H., M.R.C.S., L.R.C.P.Lond., Medical Superintendent, Tooting Bec Asylum, Tooting, S.W.
1912. Berncastle, Herbert M., M.R.C.S.Eng., L.R.C.P.Lond., Assistant Medical Officer, Croydon Mental Hospital, Warlingham, Surrey.
1879. Bevan-Lewis, William, M.Sc.Leeds, M.R.C.S., L.R.C.P.Lond., Elsinore, Dyke Road Avenue, Brighton. (*PRESIDENT, 1909-10.*)
1914. Birnie, Charlotte Murdoch, M.D., Ch.B.Edin., Assistant Medical Officer, Camberwell Infirmary, London, S.E.
1894. Blachford, James Vincent, M.D., B.S.Durh., M.R.C.S., L.R.C.P.Lond., M.P.C., City Asylum, Fishponds, Bristol.
1913. Black, Robert Sinclair, M.A.Edin., M.D., C.M.Aberd., D.P.H., M.P.C., Senior Assistant Medical Officer, Valkenburg Asylum, Cape Town, South Africa.
1908. Blackmore, Humphrey, P., M.D.St.And., M.R.C.S.Eng., L.S.A.Lond., Salisbury.
1898. Blair, David, M.A., M.D., C.M.Glasg., County Asylum, Lancaster.
1897. Blandford, Joseph John Guthrie, B.A., D.P.H.Camb., M.R.C.S.Eng., L.R.C.P.Lond., Medical Superintendent, Whalley Asylum, Lancs.
1908. Blandy, Gurth Swinnerton, M.D., Ch.B.Edin., Assistant Medical Officer Middlesex County Asylum, Napsbury, Herts.
1904. Bodvel-Roberts, Hugh Frank, M.A.Cantab., M.R.C.S., L.R.C.P.Lond., L.S.A., Middlesex County Asylum, Napsbury, near St. Albans, Herts.
1900. Bolton, Joseph Shaw, M.D., B.S., D.Sc., F.R.C.P.Lond., Medical Superintendent, West Riding Asylum, Wakefield.

1892. Bond, Charles Hubert, D.Sc., M.D., C.M.Edin., M.R.C.P.Lond., M.P.C., Commissioner in Lunacy, 66, Victoria Street, S.W. (*Hon. General Secretary*, 1906-12.)
1912. Borrie, David Forbes, M.R.C.S.Eng., L.R.C.P.Lond., Bassorah, Turkish Arabia, Persian Gulf.
1877. Bower, David, M.D., C.M.Aber., Springfield House, Bedford. (*Chairman, Parliamentary Committee*, 1907-1910.)
1877. Bowes, John Ireland, M.R.C.S.Eng., L.S.A. (address uncommunicated).
1893. Bowes, William Henry, M.D., B.S.Lond., F.R.C.S.Eng., Medical Superintendent, Plymouth Borough Asylum, Ivybridge, Devon.
1900. Bowles, Alfred, M.R.C.S., L.R.C.P.Lond., 10, South Cliff, Eastbourne.
1896. Boycott, Arthur N., M.D.Lond., M.R.C.S.Eng., L.R.C.P.Lond., Medical Superintendent, Herts County Asylum, Hill End, St. Albans, Herts. (*Hon. Sec. for S.-E. Division*, 1900-05.)
1912. Boyd, William, M.B., Ch.B.Belf. (address uncommunicated).
1898. Boyle, A. Helen A., M.D.Bruce., L.R.C.P.&S.Edin., 9, The Drive, Hove, Brighton.
1883. Boys, A. H., L.R.C.P.Edin., M.R.C.S.Eng., L.S.A.Lond., The White House, St. Albans.
1891. Braine-Hartnell, George M. P., M.R.C.S., L.R.C.P.Lond., Medical Superintendent, County and City Asylum, Powick, Worcester.
1911. Brander, John, M.B., C.B.Edin., Assistant Medical Officer, London County Asylum, Bexley, Kent.
1895. Briscoe, John Frederick, M.R.C.S., Eng., F.R.G.S., Resident Medical Superintendent, Westbrooke House Asylum, Alton, Hants.
1905. Brown, Harry Egerton, M.D., Ch.B.Glasg., M.P.C., West Koppies Asylum, Pretoria, S. Africa.
1908. Brown, Robert Cunyngham, M.D., B.S.Durh., General Board of Lunacy, 15, Rutland Square, Edinburgh.
1908. Brown, R. Dods, M.D., Ch.B., F.R.C.P.Edin., Dipl. Psych., D.P.H., Physician Superintendent, James Murray's Royal Asylum, Perth.
1903. Brown, Ralph, M.B., B.S.Lond., M.R.C.S., L.R.C.P.Lond., Bethlem Royal Hospital, S.E.
1912. Brown, William, M.D., C.M.Glas., District Medical Officer, Adviser in Lunacy to Bristol Magistrates, Park View, Fishponds, Bristol.
1893. Bruce, Lewis C., M.D., F.R.C.P.Edin., M.P.C., Medical Superintendent, District Asylum, Druid Park, Murthly, N.B. (*Co-Editor of Journal since 1911; Hon. Sec. for Scottish Division*, 1901-1907.)
1913. Brunton, George Llewellyn, M.B., Ch.B.Edin., North Riding Asylum, Clifton, York.
1912. Buchanan, Henry Meredith, M.B., Ch.B.Edin., Mental Hospital, Seacliff, Otago, N.Z.
1912. Buchanan, William Murdoch, M.B., Ch.B.Glas., Linden Bank, Lenzie, Glasgow.
1892. Bullen, Frederick St. John, M.R.C.S.Eng., L.S.A.Lond., 3, Richmond Park Road, Clifton, Bristol.
1908. Bullmore, Charles Cecil, J.P., L.R.C.P.&S.Edin., L.R.F.P.S.Glas., Medical Superintendent, Flower House, Catford.
1912. Burke, Joseph D. G., M.B., Ch.B.R.U.I., Assistant Medical Officer, District Asylum, Melton, Suffolk.
1911. Buss, Howard Decimus, B.A., B.Sc.France, M.D.Bruce.&Cape, M.R.C.S., L.R.C.P., L.M.S.S.A.Lond., Assistant Medical Officer, Fort Beaufort Asylum, Cape Colony.
1910. Cahir, John P., M.B., B.Ch.R.U.I., *R.A.M.C.* (address uncommunicated).
1891. Caldecott, Charles, M.B., B.S.Lond., M.R.C.S., L.R.C.P.Lond., Medical Superintendent, Earlswood Asylum, Redhill, Surrey.
1889. Calcott, James T., M.D., B.S.Durh., M.R.C.S.Eng., Medical Superintendent, Borough Asylum, Newcastle-on-Tyne.
1913. Cameron, John Allan Munro, M.B., Ch.B.Glas., Pathologist, Scalebor Park Asylum, Burley-in-Wharfedale, Yorks.

1894. Campbell, Alfred Walter, M.D., C.M.Edin., Macquarie Chambers, 183, Macquarie Street, Sydney, New South Wales.
1909. Campbell, Donald Graham, M.B., C.M.Edin., "Auchmillam," 12, Reidhaven Street, Elgin.
1914. Campbell, Finlay Stewart, M.D., C.M.Glas., District Medical Officer, Glasgow Parish, 19, Westercraigs, Dennistoun, Glasgow.
1880. Campbell, Patrick E., M.B., C.M.Edin., Medical Superintendent, Metropolitan Asylum, Caterham, Surrey.
1897. Campbell, Robert Brown, M.D., C.M., F.R.C.P.E., Medical Superintendent, Stirling District Asylum, Larbert. (*Secretary for Scottish Division from 1910.*)
1914. Carlsson, Carl Petter, M.B., Ch.B.Edin. (address uncommunicated).
1905. Carre, Henry, L.R.C.P.&S.Irel., Woodilee Asylum, Lenzie, Glasgow.
1891. Carswell, John, L.R.C.P.Edin., L.R.F.P.S.Glasg., 43, Moray Place, Edinburgh.
1874. Cassidy, D. M., M.D., C.M.McGill Coll., Montreal, D.Sc. (Public Health) Edin., F.R.C.S.Edin., Medical Superintendent, County Asylum, Lancaster.
1888. Chambers, James, M.A., M.D.R.U.I., M.P.C., The Priory, Roehampton. (*Co-Editor of Journal since 1905, Assistant Editor 1900-05.*) (PRESIDENT, 1913-14.)
1911. Chambers, Walter Duncanon, M.A., M.D., Ch.B.Edin., M.P.C., Crichton Royal Institution, Dumfries, N.B.
1865. Chapman, Thomas Algeruon, M.D.Glas., L.R.C.S.Edin., F.Z.S., Betula, Reigate.
1907. Chislett, Charles G. A., M.B., Ch.B.Glasg., Assistant Medical Officer, Woodilee Asylum, Lenzie, Glasgow.
1880. Christie, J. W. Stirling, L.R.C.P.&S.Edin., Medical Superintendent, County Asylum, Stafford.
1878. Clapham, Wm. Crochley S., M.D., F.R.C.P.Ed., M.R.C.S., F.S.S., The Five Gables, Mayfield, Sussex. (*Hon. Sec. N. and M. Division, 1897-1901.*)
1907. Clarke, Geoffrey, M.D.Lond., Senior Assistant Medical Officer, London County Asylum, Banstead, Sutton, Surrey.
1910. Clarke, James Kilian P., M.B., B.Ch.R.U.I., D.P.H., High Street, Oakham.
1907. Clarkson, Robert Durward, B.Sc., M.D., C.M.Edin., F.R.C.P.Edin. (Medical Officer, Scottish National Institute for the Education of Imbecile Children), The Park, Larbert, Stirling.
1901. Cleland, William Lennox, M.B., C.M.Edin., Park Side, Adelaide, South Australia.
1862. Clouston, Sir Thomas S., M.D., LL.D.Edin., F.R.C.P., F.R.S.E., 26, Heriot Row, Edinburgh. (*Editor of Journal, 1873-1881.*) (PRESIDENT, 1888.)
1892. Cole, Robert Henry, M.D.Lond., M.R.C.P.Lond., 25, Upper Berkeley Street, W. (*Secretary of Parliamentary Committee since 1912.*)
1900. Cole, Sydney John, M.A., M.D., B.Ch.Oxon., Medical Superintendent, Wilts County Asylum, Devizes.
1906. Collier, Walter Edgar, M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, Kent County Asylum, Maidstone.
1903. Collins, Michael Abdy, M.D., B.S.Lond., M.R.C.S., L.R.C.P.Lond., Medical Superintendent, Ewell Colony, Epsom, Surrey. (*Hon. General Secretary since 1912.*)
1910. Conlon, Thomas Peter, L.R.C.P.&S.Irel., Resident Medical Superintendent, District Asylum, Monaghan.
1914. Conolly, Victor Lindley, M.B., B.Ch.Belfast, Assistant Medical Officer, Colney Hatch Asylum, N.
1878. Cooke, Edward Marriott, M.D.Lond., M.R.C.S.Eng., Commissioner in Lunacy, 69, Onslow Square, S.W.
1910. Coombes, Percival Charles, M.R.C.S., L.R.C.P.Lond., Medical Superintendent, Surrey County Asylum, Netherne.

1905. Cooper, K. D., L.R.C.P.&S.Edin., L.R.F.P.S.Glas., c/o Leopold & Co., Apollo, Bunder, Bombay.
1903. Cormac, Harry Dove, M.B., B.S.Madras, Medical Superintendent, Cheshire County Asylum, Macclesfield.
1891. Corner, Harry, M.D.Lond., M.R.C.S., L.R.C.P.Lond., M.P.C., 37, Harley Street, W.
1905. Cotter, James, L.R.C.P.&S.E., L.R.F.P.S.Glas., Down District Asylum, Downpatrick.
1897. Cotton, William, M.A., M.D.Edin., D.P.H.Cantab., M.P.C., 231, Gloucester Road, Bishopston, Bristol.
1910. Coupland, William Henry, L.R.C.S.&P.Edin., Senior Assistant Medical Officer, 1, Sea View, South Road, Lancaster.
1913. Court, E. Percy, M.R.C.S., L.R.C.P.Lond., Severalls Asylum, Colchester.
1893. Cowen, Thomas Philip, M.D., B.S.Lond., M.R.C.S., L.R.C.P.Lond., Medical Superintendent, County Asylum, Rainhill, Lancashire.
1911. Cox, Donald Maxwell, M.R.C.S., L.R.C.P.Lond., The Hall, Headcorn, Kent.
1884. Cox, L. F., M.R.C.S.Eng., Plas Caermeddyg, Llanbedr, R.S.O., Merioneth.
1893. Craig, Maurice, M.A., M.D., B.C.Cantab., F.R.C.P.Lond., M.P.C., 87, Harley Street, W. (*Hon. Secretary of Educational Committee, 1905-8; Chairman of Educational Committee since 1912.*)
1897. Cribb, Harry Gifford, M.R.C.S.Eng., L.R.C.P.Lond., Medical Superintendent, Winterton Asylum, Ferryhill, Durham.
1911. Crichlow, Charles Adolphus, M.B., Ch.B.Glas. (address uncommunicated).
1914. Crookshank, Francis Graham, M.D.Lond., M.R.C.P. (travelling), c/o 25, Duke Street, Piccadilly, W.
1904. Cross, Harold Robert, L.S.A.Lond., F.R.G.S., Storthes Hall Asylum, Kirkburton, near Huddersfield.
1914. Cruickshank, J., M.D., Ch.B.Glas., Pathologist, Crichton Royal Hospital, Dumfries.
1907. Daniel, Alfred Wilson, B.A., M.D., B.C.Cantab., M.R.C.S., L.R.C.P.Lond., Senior Assistant Medical Officer, London County Asylum, Hanwell, W.
1896. Davidson, Andrew, M.D., C.M.Aber., M.P.C., Wyoming, Macquarie Street, Sydney, N.S.W.
1911. Davie, James, M.B., Ch.B.Edin., 84, Braid Road, Edinburgh.
1914. Davies, Laura Katherine, M.B., Ch.B.Edin., Pathologist and Assistant Medical Officer, Edinburgh City Asylum, Bangour, Dechmont, Linlithgowshire.
1891. Davis, Arthur N., L.R.C.P.&S.Edin., Medical Superintendent, County Asylum, Exminster, Devon.
1894. Dawson, William R., B.A., M.D., B.Ch.Dubl., F.R.C.P.I., D.P.H., Inspector of Lunatics in Ireland, Claremont, Burlington Road, Dublin. (*Hon. Sec. to Irish Division, 1902-11; PRESIDENT, 1911-12.*)
1883. De Lisle, Samuel Ernest, L.R.C.P.&S.I., Freaghmore, Lower Bourne, Farnham, Surrey.
1901. De Steiger, Adèle, M.D.Lond., County Asylum, Brentwood, Essex.
1905. Devine, Henry, M.D., B.S., M.R.C.P.Lond., M.R.C.S.Eng., M.P.C., Medical Superintendent, The Asylum, Milton, Portsmouth.
1904. Devon, James, L.R.C.P. & S.Edin., 1, North Park Terrace, Hillhead, Glasgow.
1903. Dickson, Thomas Graeme, L.R.C.P. & S.Edin., Medical Superintendent, Wye House, Buxton.
1909. Dillon, Kathleen, L.R.C.P.&S.I., Assistant Medical Officer, District Asylum, Mullingar.
1905. Dixon, J. Francis, M.A., M.D., B.Ch.Dubl., M.P.C., Medical Superintendent, Borough Asylum, Leicester.
1879. Dodds, William J., M.D., C.M., D.Sc.Edin., Glencoil, Bellahouston, Glasgow.
1911. Donald, John Quin, L.R.C.P.&S.Edin., Medical Superintendent, Bally-anghrim Sanatorium, Port Stewart, Co. Derry.

1908. Donald, Robert, M.D., Ch.B.Glas., 3, Gilmour Street, Paisley.
1889. Donaldson, William Ireland, B.A., M.D., B.Ch.Dubl., Medical Superintendent, County of Loudon Manor Asylum, Epsom, Surrey.
1892. Donelan, John O'Connor, L.R.C.P.&S.I., M.P.C., St. Dymphna's, North Circular Road, Dublin.
1902. Douglas, Archibald R., L.R.C.P.&S.Edin., L.R.F.P.S.Glas., M.P.C., Royal Albert Asylum, Lancaster.
1890. Douglas, William, M.D.R.U.I., M.R.C.S.Eng., F.R.G.S., Brandfold, Goudhurst, Kent.
1905. Dove, Augustus Charles, M.D., B.S.Durh., M.R.C.S.Eng., "Brightside," Crouch End Hill, N.
1897. Dove, Emily Louisa, M.B.Lond., 11, Jenner House, Hunter Street, Brunswick Square, W.C.
1903. Dow, William Alex., M.D., B.S.Durh., M.R.C.S., L.R.C.P.Lond., D.P.H., H.M. Prison, Lewes.
1910. Downey, Michael Henry, M.B., Ch.B.Melb., L.R.C.P.&S.Edin., L.R.F.P.S. Glasg., Assistant Medical Officer, Parkside Asylum, Adelaide, South Australia.
1884. Drapes, Thomas, M.B.Dubl., L.R.C.S.I., Medical Superintendent, District Asylum, Enniscorthy, Ireland. (PRESIDENT-ELECT, 1910-11; Co-Editor of *Journal* since 1912.)
1907. Dryden, A. Mitchell, M.B., Ch.B.Edin., Burailly House, Lockerbie Road, Dumfries.
1902. Dudgeon, Herbert Wm., M.D.Durh., M.R.C.S.Eng., L.R.C.P.Lond., Medical Officer to the Egyptian Asylum, Khanka Asylum, Egypt.
1899. Dudley, Francis, L.R.C.P.&S.I., Senior Assistant Medical Officer, County Asylum, Bodmin, Cornwall.
1903. Dunston, John Thomas, M.D., B.S.Lond., Medical Superintendent, West Koppies Asylum, Pretoria, South Africa.
1913. Dyer, Sidney Reginald, M.D.Bru., L.R.C.P.Lond., M.R.C.S.Eng., L.S.A.Lond., D.P.H., Barrister-at-Law, Principal Medical Officer, H.M. Prison, Brixton; 151, Brixton Hill, S.W.
1911. Dykes, Percy Armstrong, M.R.C.S., L.R.C.P.Lond., Senior Assistant Medical Officer, Fulbourne Asylum, Cambridge.
1899. Eades, Albert I., L.R.C.P. & S.I., Medical Superintendent, North Riding Asylum, Clifton, Yorks.
1874. Eager, Reginald, M.D.Lond., M.R.C.S.Eng., L.S.A.Lond. (address not communicated).
1906. Eager, Richard, M.D., Ch.B.Aber., M.P.C., Assistant Medical Officer, Devon County Asylum, Exminster.
1873. Eager, Wilson, M.R.C.S., L.R.C.P., L.S.A.Lond., St. Aubyn's, Woodbridge, Suffolk.
1881. Earle, Leslie M., M.D., C.M.Edin., 108, Gloucester Terrace, Hyde Park, W.
1891. Earls, James Henry, M.D., M.Ch.R.U.I., D.P.H., L.S.A.Lond., M.P.C., Barrister-at-Law, Fenstanton, Christchurch Road, Streatham Hill, S.W.
1903. East, Guy Rowland, M.D., B.S.Durh., D.P.H., Northumberland County Asylum, Morpeth.
1907. East, Wm. Norwood, M.D.Lond., M.R.C.S., L.R.C.P.Lond., M.P.C., H.M. Prison, Manchester; also 171, Cheetham Hill Road, Manchester.
1895. Easterbrook, Charles C., M.A., M.D., F.R.C.P.Ed., M.P.C., J.P., Physician Superintendent, Crichton Royal Institution, Dumfries.
1914. Eder, M.D., B.Sc.Lond., M.R.C.S.Eng., L.R.C.P.Lond., Medical Officer, Deptford School Clinic, 7, Welbeck Street, W.
1895. Edgerley, Samuel, M.A., M.D., C.M.Edin., M.P.C., Medical Superintendent, West Riding Asylum, Menston, nr. Leeds.
1897. Edwards, Francis Henry, M.D.Bru., M.R.C.P.Lond., M.R.C.S.Eng., Medical Superintendent, Camberwell House, S.E.
1901. Elgee, Samuel Charles, L.R.C.P.&S.I., Senior Assistant Medical Officer, London County Asylum, Colney Hatch, N.

1889. Elkins, Frank Ashby, M.D., C.M.Edin., M.P.C., Medical Superintendent, Metropolitan Asylum, Leavesden, Herts.
1898. Ellerton, Henry B., M.R.C.S., L.R.C.P.Lond., Inspector of the Insane, Hospital for the Insane, Goodna, Brisbane, Queensland, Australia.
1912. Ellerton, John Frederick Heise, M.D.Brux., M.R.C.S.Eng., L.R.C.P. Edin., Rotherwood, Leamington Spa.
1890. Ellis, William Gilmore, M.D.Brux., M.R.C.S.Eng., L.S.A.Lond., J.P., Principal Civil Medical Officer, Singapore, Straits Settlements.
1908. Ellison, Arthur, M.R.C.S., L.R.C.P.Eng., Deputy Medical Officer, H.M. Prison, Leeds, 120, Domestic Street, Holbeck, Leeds.
1899. Ellison, F. C., B.A., M.D., B.Ch.Dubl., Resident Medical Superintendent, District Asylum, Castlebar.
1911. Emslie, Isabella Galloway, M.D., Ch.B.Edin., West House, Royal Asylum, Morningside, Edinburgh.
1911. English, Ada, M.B., B.Ch.R.U.I., Assistant Medical Officer, District Asylum, Ballinasloe.
1901. Erskine, Wm. J. A., M.D., C.M.Edin., Senior Assistant Medical Officer, City Asylum, Nottingham.
1895. Eurich, Frederick Wilhelm, M.D., C.M.Edin., 8, Mornington Villas, Maningham Lane, Bradford.
1894. Eustace, Henry Marcus, B.A., M.D., B.Ch.Dubl., M.P.C., Medical Superintendent, Hampstead and Highfield Private Asylum, Glasnevin, Dublin.
1909. Eustace, William Neilson, L.R.C.S.&P.Irel., Lisronagh, Glasnevin, co. Dublin.
1909. Evans, George, M.B.Lond., Senior Assistant Medical Officer, Severalls Asylum, Colchester.
1891. Ewan, John Alfred, M.A. St. And., M.D., C.M.Edin., M.P.C., Greyness, Sleaford, Linco.
1884. Ewart, C. T., M.D., C.M.Aberd., Senior Assistant Medical Officer, Claybury Asylum, Woodford Bridge, Essex.
1906. Ewens, George Francis William, Major I.M.S. Bengal, c/o Messrs. Grindlay & Co., 54, Parliament Street, S.W.
1914. Ewing, Cecil Wilmot, L.R.C.P.I. & L.R.C.S.I., Second Assistant Medical Officer, Chatham Asylum, near Canterbury.
1907. Exley, John, L.R.C.P.I., M.R.C.S.Eng., Medical Officer, H.M. Prison; Grove House, New Wortley, Leeds.
1894. Farquharson, William F., M.D., C.M.Edin., M.P.C., Medical Superintendent, Counties Asylum, Garlands, Carlisle.
1907. Farries, John Stothart, L.R.C.P.&S.Edin., L.R.F.P.S.Glas., Medical Superintendent, Minda Home, Adelaide, South Australia.
1908. Faulks, Edgar, M.R.C.S., L.R.C.P.Lond., Senior Assistant Medical Officer, London County Asylum, Bexley.
1903. Fennell, Charles Henry, M.A., M.D.Oxon, M.R.C.P.Lond., The Manor House, West Hoathly, East Grinstead.
1908. Fenton, Henry Felin, M.B., Ch.B.Edin., Assistant Medical Officer, County and City Asylum, Powick, Worcester.
1907. Ferguson, J. J. Harrower, M.B., Ch.B.Edin., Senior Assistant Medical Officer, Fife and Kinross Asylum, Cupar, Fife.
1897. Fielding, James, M.D., Vict. Univ., Canada, M.R.C.S.Eng., L.R.C.P. Edin., 18, The Crescent, Norwich.
1906. Fielding, Saville James, M.B., B.S.Durh., Medical Superintendent, Bethel Hospital, Norwich.
1873. Finch, John E. M., M.A., M.D.Cantab., M.R.C.S.Eng., L.S.A.Lond., Holmdale, Stoneysgate, Leicester.
1889. Finch, Richard T., B.A., M.B.Cantab., M.R.C.S.Eng., L.S.A.Lond., Medical Superintendent, Fisherton House, Salisbury.
1889. Finlay, David, M.D., C.M.Glasg., Medical Superintendent, County Asylum, Bridgend, Glamorgan.
1906. Firth, Arthur Harcus, M.A., M.D., B.Ch.Edin., Deputy Medical Superintendent, Burnsley Hall, Bromsgrove, Worcestershire.

1903. Fitzgerald, Alexis, L.R.C.P. & S.I., District Asylum, Waterford.
1894. Fitzgerald, Charles E., M.D., M.Ch.Dubl., F.R.C.S.I., Surgeon-Oculist to the King in Ireland, President of the Royal College of Physicians of Ireland, 27, Upper Merrion Street, Dublin.
1888. Fitz-Gerald, Gerald C., B.A., M.D., B.C.Cantab., M.P.C., Medical Superintendent, Kent County Asylum, Chartham, nr. Canterbury.
1908. Fitzgerald, James Francis, L.R.C.P.&S.Irel., Assistant Medical Officer, District Asylum, Clonmel, Ireland.
1904. Fleming, Wilfrid Louis Remi, M.R.C.S., L.R.C.P.Lond., Suffolk House, Pirbright, Surrey.
1894. Fleury, Eleonora Lilian, M.D., B.Ch.R.U.I., Assistant Medical Officer, Richmond Asylum, Dublin.
1908. Flynn, Thos. Aloysius, L.R.C.P.&S.I., County Asylum, Thorpe, Norwich.
1902. Forde, Michael J., M.D., B.Ch.R.U.I., Assistant Medical Officer, Portrane Asylum, Ireland.
1911. Forrester, Archibald Thomas William, M.D., B.S., M.R.C.S., L.R.C.P.Lond., Senior Assistant Medical Officer, Leicester and Rutland Counties Asylum, Narborough.
1913. Forward, Ernest Lionel, M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, The Coppice, Nottingham.
1913. Fothergill, Claude Francis, B.A., M.B., B.C.Cantab., M.R.C.S., L.R.C.P.Lond., Hensol, Chorley Wood, Herts.
1909. Foulerton, Alexander Grant Russell, F.R.C.S.Eng., L.R.C.P.Lond., D.P.H.Cantab. (*County Medical Officer of Health for E. Sussex*), Middlesex Hospital, W., Wealdside, Lewes.
1861. Fox, Charles H., M.D.St. And., F.R.C.P.E., M.R.C.S.Eng., 35, Heriot Row, Edinburgh.
1912. Fox, Charles J., M.R.C.S.Eng., L.R.C.P.Lond., Blidworth, Notts.
1881. Fraser, Donald, M.D., C.M.Glasg., F.R.F.P.S., 13, Royal Terrace, West Glasgow.
1901. French, Louis Alexander, M.R.C.S., L.R.C.P.Lond., H.M. Prison, Portland, Dorset.
1902. Fuller, Lawrence Otway, M.R.C.S.Eng., L.R.C.P.Lond., Medical Superintendent, Three Counties' Asylum, Hitchin, Herts.
1914. Gage, John Munro, L.R.C.P.&S.I., The Retreat, York.
1906. Gane, Edward Palmer Steward, M.D.Durh., M.R.C.S., L.R.C.P.Lond., Cotherstone, Yorks.
1912. Garry, John William, M.B., B.Ch., N.U.I., Assistant Medical Officer, Ennis District Asylum, Ireland.
1912. Gavin, Lawrence, M.B., Ch.B.Edin., L.R.C.P.&S.Edin., L.R.F.P.S.Glasg., Superintendent, Mullingar District Asylum, Ireland.
1885. Gayton, Francis C., M.D., C.M.Aberd., M.R.C.S.Eng., Much Hadham, Herts.
1908. Geale, William James, L.R.C.P.Edin., L.R.F.P.S.Glasg. (address uncommunicated).
1896. Geddes, John W., M.B., C.M.Edin., Medical Superintendent, County Borough Asylum, Berwick Lodge, Middlesbrough, Yorks.
1892. Gemmel, James Francis, M.B.Glasg., Medical Superintendent, County Asylum, Whittingham, Preston.
1914. Gettings, Harold Salter, L.R.C.P. & S.Edin., L.F.P.S.G., D.P.H.Birm., Pathologist, West Riding Asylum, Wakefield.
1899. Gilfillan, Samuel James, M.A., M.B., C.M.Edin., Medical Superintendent, London County Asylum, Colney Hatch.
1910. Gilfillan, William, M.B., Ch.B.Glasg., Alma Lane, Falkirk.
1912. Gill, Eustace Stanley Hayes, M.B., Ch.B.Liverp., Shaftesbury House, Formby, Liverpool.
1889. Gill, Stanley A., B.A.Dubl., M.D.Durh., M.R.C.P.Lond., M.R.C.S.Eng., Shaftesbury House, Formby, Liverpool.
1904. Gillespie, Daniel, M.D. B.Ch.R.U.I., Dipl. Psych., Wadsley Asylum, near Sheffield.

1897. Gilnour, John Rutherford, M.B., C.M., F.R.C.P. Edin., M.P.C., Medical Superintendent, West Riding Asylum, Scalebor Park, Burley-in-Wharfedale, Yorks.
1906. Gilnour, Richard Withers, M.B., B.S. Durh., M.R.C.S., L.R.C.P. Lond., Homewood House, West Meon, Hants.
1878. Glendinning, James, M.D. Glasg., L.R.C.S. Edin., Hill Court, Lansdown Road, Abergavenny.
1898. Goldie-Scot, Thomas G., M.B., C.M. Edin., M.R.C.S., L.R.C.P. Lond., Pilmuir, Pencaitland, N.B.
1897. Good, Thomas Saxty, M.R.C.S. Eng., L.R.C.P. Lond., Medical Superintendent, County Asylum, Littlemore, Oxford.
1889. Goodall, Edwin, M.D., B.S., F.R.C.P. Lond., M.P.C., Medical Superintendent, City Asylum, Cardiff.
1899. Gordon, James Leslie, M.D., C.M. Aberd., Medical Superintendent, Fountain Temporary Asylum, Tooting Grove, Tooting Graveney, S.W.
1905. Gordon-Munn, John Gordon, M.D. Edin., F.R.S.E., Heigham Hall, Norwich.
1901. Gostwyck, C. H. G., M.B., Ch.B., M.R.C.P. Edin., M.P.C., Dipl. Psych., Stirling District Asylum, Larbert.
1912. Graham, Gilbert Malise, M.B., Ch.B. Edin., R.N. College, Greenwich.
1914. Graham, Norman Bell, B.A., R.U.I., M.B., B.Ch. Belfast, Assistant Medical Officer, District Asylum, Belfast.
1894. Graham, Samuel, L.R.C.P. Lond., Resident Medical Superintendent, District Asylum, Antrim.
1887. Graham, William, M.D. R.U.I., L.R.C.S. Edin., Medical Superintendent, District Lunatic Asylum, Belfast.
1908. Graham, William S., M.B., B.Ch. R.U.I., Assistant Medical Officer, Somerset and Bath Asylum, near Taunton.
1909. Greene, Thomas Adrian, L.R.C.S. & P. Irel., J.P., Medical Superintendent, District Asylum, Carlow.
1886. Greenlees, T. Duncan, M.D., C.M. Edin., F.R.S.E., Rostrevor, Kirtleton Avenue, Weymouth.
1912. Greeson, Clarence Edward, M.D., Ch.B. Aberd., Surgeon, *R.N.*
1904. Griffin, Ernest Harrison, B.A. Cantab., L.S.A. Lond. (address uncommunicated).
1901. Grills, Galbraith Hamilton, M.D., B.Ch. R.U.I., Dipl. Psych., Medical Superintendent, "Elmwood," Liverpool Road, Chester.
1900. Grove, Ernest George, M.R.C.S., L.R.C.P. Lond., Bootham Park, York.
1894. Gwynn, Charles Henry, M.D., C.M. Edin., M.R.C.S. Eng., co-Licensee, St. Mary's House, Whitchurch, Salop.
1894. Halsted, Harold Cecil, M.D. Durh., M.R.C.S., L.R.C.P. Lond., Manor Road, Selsey, Sussex.
1903. Hanbury, Langton Fuller, M.R.C.S. Eng., L.R.C.P. Lond., Medical Superintendent, West Ham Borough Asylum, Ilford, Essex.
1901. Harding, William, M.D. Edin., M.R.C.P. Lond., Medical Superintendent, Northampton County Asylum, Berry Wood, Northampton.
1899. Harmer, W. A., L.S.A., Resident Superintendent and Licensee, Redlands Private Asylum, Tonbridge, Kent.
1904. Harper-Smith, George Hastie, B.A. Cantab., M.R.C.S., L.R.C.P. Lond., Senior Assistant Medical Officer, Brighton County Borough Asylum, Haywards Heath.
1898. Harris-Liston, L., M.D. Brux., M.R.C.S., L.R.C.P. Lond., L.S.A., Middleton Hall, Middleton St. George, Co. Durham.
1905. Hart, Bernard, M.D. Lond., M.R.C.S. Eng., 29B, Wimpole Street, and Northumberland House, Finsbury Park, N.
1886. Harvey, Bagenal Crosbie, L.R.C.P. & S. Edin., L.A.H. Dubl., Resident Medical Superintendent, District Asylum, Clonmel.

1892. Haslett, William John H., M.R.C.S., L.R.C.P.Lond., M.P.C., Resident Medical Superintendent, Halliford House, Upper Halliford, Sheperton.
1891. Havelock, John G., M.D., C.M.Edin., Little Stohdam, Liss, Hants.
1890. Hay, J. F. S., M.B., C.M.Aberd., Inspector-General of Asylums for New Zealand, Government Buildings, Wellington, New Zealand.
1900. Haynes, Horace E., M.R.C.S.Eng., L.S.A., J.P., Littleton Hall, Brentwood.
1895. Hearder, Frederic P., M.D., C.M.Edin., Medical Superintendent, Yorkshire Inebriate Reformatory, Cattal, Whixley, near York.
1911. Heffernan, Capt. P., I.M.S., B.A., M.B., B.Ch.C.U.I., Locoek's Gardens, Kilpauh, Madras.
1905. Henderson, George, M.A., M.B., Ch.B.Edin., 25, Commercial Road, Peckham, S.E.
1906. Herbert, Thomas, M.R.C.S., L.R.C.P.Lond., York City Asylum, Fulford, York.
1877. Hetherington, Charles E., B.A., M.B., M.Ch.Dubl., Medical Superintendent, District Asylum, Londonderry, Ireland.
1877. Hewson, R. W., L.R.C.P.&S.Edin., Medical Superintendent, Coton Hill, Stafford.
1914. Hewson, R. W. Dale, L.R.C.P.&S.Edin., L.R.F.P.&S.Glas., Coton Hill Hospital, Stafford.
1902. Higginson, John Wigmore, M.R.C.S., L.R.C.P.Lond., Resident Medical Officer, Hayes Park Asylum, Hayes Park, Middlesex.
1912. Higson, William Davis, M.B., Ch.B.Liverp., D.P.H., Deputy Medical Officer, H.M. Prison, Brixton; 7, Clovelly Gardens, Upper Tulse Hill, S.W.
1882. Hill, H. Gardiner, M.R.C.S.Eng., L.S.A., Pentillie, Leopold Road, Wimbledon Park, S.W.
1914. Hills, Harold William, B.S., M.B., B.Sc.Lond., M.R.C.S., L.R.C.P.Lond., *R.A.M.C.*
1907. Hine, T. Guy Macaulay, M.A., M.D., B.C.Cantab., 37, Hertford Street, Mayfair, W.
1909. Hodgson, Harold West, M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, Severalls Asylum, Colchester.
1908. Hogg, Archibald, M.B., Ch.B.Glas., 54, High Street, Paisley, N.B.
1900. Holländer, Bernard, M.D.Freib., M.R.C.S., L.R.C.P.Lond., 57, Wimpole Street, W.
1912. Holyoak, Walter L., M.D., B.S.Lond., 77, Welbeck Street, W.
1903. Hopkins, Charles Leighton, B.A., M.B., B.C.Cantab., Medical Superintendent, York City Asylum, Fulford, York.
1913. Hopwood, Joseph Stanley, M.B., B.S., M.R.C.S., M.R.C.P.Lond., Sunnybank House, Cornholme, Todmorden, Lancs.
1894. Hotchkis, Robert D., M.A.Glasg., M.D., B.S.Durh., M.R.C.S., L.R.C.P.Lond., M.P.C., Renfrew Asylum, Dykebar, N.B.
1907. Howard, S. Carlisle, M.D., Ch.B.Aberd., Senior Assistant Medical Officer, County Asylum, Chester.
1912. Hughes, Frank Percival, M.B., B.S.Lond., M.R.C.S., L.R.C.P.Lond., The Grove, Pinner, Middlesex.
1900. Hughes, Percy T., M.B., C.M.Edin., D.P.H., Medical Superintendent, Worcestershire County Asylum, Barnsley Hall, Bromsgrove.
1913. Hughes, Robert, M.B.Lond., M.R.C.S., L.R.C.P.Lond., M.P.C. (*School Medical Officer, County Borough of Stoke-on-Trent*), Heron House, Fenton, Stoke-on-Trent.
1904. Hughes, William Stanley, M.B., B.S.Lond., M.R.C.S., L.R.C.P.Lond., Medical Superintendent, Shropshire County Asylum, Bicton Heath, Shrewsbury.
1897. Hunter, David, M.A., M.B., B.C.Cantab., L.S.A., Medical Superintendent, The Coppice, Nottingham. (*Secretary for S.E. Division, 1910-1913.*)
1909. Hunter, Douglas William, M.B., Ch.B.Glasg., Assistant Medical Officer, 10, Hallfield Road, Bradford.

1912. Hunter, George Yeates Cobb, Colonel, *I.M.S.*, *M.R.C.S.*, *L.R.C.P.Lond.*, *M.P.C.*, c/o Messrs. Grindlay & Co., 54, Parliament Street, S.W.
1904. Hunter, Percy Douglas, *M.R.C.S.*, *L.R.C.P.Lond.*, Three Counties Asylum, near Hitchin.
1882. Hyslop, James, *D.S.O.*, *M.B.*, *C.M.Edin.*, Medical Superintendent, Natal Government Asylum, Pietermaritzburg.
1888. Hyslop, Theo. B., *M.D.*, *C.M.Edin.*, *M.R.C.P.E.*, *L.R.C.S.E.*, *F.R.S.E.*, 5, Portland Place, London, W.
1908. Inglis, J. P. Park., *M.B.*, *Ch.B.Edin.*, Assistant Medical Officer, Fountain Temporary Asylum, Tooting Grove, Tooting Graveney, S.W.
1906. Irwin, Peter Joseph, *L.R.C.P.&S.I.*, Assistant Medical Officer, District Asylum, Limerick.
1911. Jackson, David James, *B.A.*, *M.D.*, *B.Ch.R.U.I.*, Assistant Medical Officer, Mental Hospital, Cardiff.
1914. James, George William Blomfield, *M.B.*, *B.S.Lond.*, Resident Medical Officer, Moorcroft, Hillingdon, Uxbridge.
1908. Jeffrey, Geo. Rutherford, *M.D.*, *Ch.B.Glas.*, *F.R.C.P.E.*, *M.P.C.*, Medical Superintendent, Bootham Park, York.
1907. Jex-Blake, Bertha, *M.B.*, *Ch.B.Edin.*, 13, Ennismore Gardens, S.W.
1910. Johnson, Cecil, *M.B.*, *Ch.B.Vict.*, "Cricklewood," East Sheen, S.W.
1893. Johnston, Gerald Herbert, *L.R.C.S.&P.Edin.*, *L.R.F.P.S.Glas.*, Brooke House, Upper Clapton, N.
1905. Johnston, Thomas Leonard, *L.R.C.P.&S.Edin.*, *L.R.F.P.S.Glas.*, Medical Superintendent, Bracebridge Asylum, Lincoln.
1912. Johnstone, Emma May, *L.R.C.P. & S.Edin.*, *L.R.F.P.S.Glas.*, *M.P.C.*, *Dipl. Psych.*, Holloway Sanatorium, Virginia Water, Surrey.
1878. Johnstone, J. Carlyle, *M.D.*, *C.M.Glas.*, Medical Superintendent, Roxburgh District Asylum, Melrose.
1880. Jones, D. Johnston, *M.D.*, *C.M.Edin.* (travelling).
1879. Kay, Walter S., *M.D.*, *C.M.Edin.*, *M.R.C.S.Eng.*, 1, Rutland Park, Sheffield.
1886. Keay, John, *M.D.*, *C.M.Glasg.*, *F.R.C.P.Edin.*, Medical Superintendent, Bangour Village, Uphall, Linlithgowshire.
1909. Keith, William Brooks, *M.B.*, *Ch.B.Aberd.*, *M.P.C.*, Army Medical Corps.
1909. Kellas, Arthur, *M.B.*, *Ch.B.*, *D.P.H.Aberd.*, Senior Assistant Physician, Royal Asylum, Aberdeen.
1908. Kelly, Richard, *M.D.*, *B.Ch.Dub.*, Assistant Medical Officer, Storther's Hall Asylum, Kirkburton, near Huddersfield.
1907. Keene, George Henry, *M.D.*, The Asylum, Goodmayes, Ilford, Essex.
1898. Kemp, Norah, *M.B.*, *C.M.Glas.*, Hill Rise, The Mount, York.
1899. Kennedy, Hugh T. J., *L.R.C.P.&S.I.*, Assistant Medical Officer, District Asylum, Enniscorthy, Wexford.
1897. Kerr, Hugh, *M.A.*, *M.D.Glasg.*, Medical Superintendent, Bucks County Asylum, Stone, Aylesbury, Bucks.
1902. Kerr, Neil Thomson, *M.B.*, *C.M.Ed.*, Medical Superintendent, Lanark District Asylum, Hartwood, Shotts, N.B.
1893. Kershaw, Herbert Warren, *M.R.C.S.Eng.*, *L.R.C.P.Lond.*, Dinsdale Park, near Darlington.
1897. Kidd, Harold Andrew, *M.R.C.S.Eng.*, *L.R.C.P.Lond.*, Medical Superintendent, West Sussex Asylum, Chichester.
1903. King, Frank Raymond, *B.A.Cantab.*, *M.R.C.S.Eng.*, *L.R.C.P.Lond.*, Medical Superintendent, Peckham House, Peckham, S.E.
1897. Kingdon, Wilfred, *M.B.*, *B.S.Durh.*, 160, Goldhawk Road, W.
1902. King-Turner, A. C., *M.B.*, *C.M.Edin.*, The Retreat, Fairford, Gloucestershire.

1899. Kirwan, James St. L., B.A., M.B., B.Ch.R.U.I., Medical Superintendent, District Asylum, Ballinasloe, Ireland.
1903. Kough, Edward Fitzadam, B.A., M.B., B.Ch.Dubl., Senior Assistant Medical Officer, County Asylum, Gloucester.
1898. Labey, Julius, M.R.C.S., L.R.C.P., L.S.A.Lond., Medical Superintendent, Public Asylum, Jersey.
1902. Langdon-Down, Percival L., M.A., M.B., B.C.Cantab., Normansfield, Hampton Wick, Middlesex.
1896. Langdon-Down, Reginald L., M.A., M.B., B.C.Cantab., M.R.C.P.Lond., Normansfield, Hampton Wick.
1914. Ladell, R. G. Macdonald, M.B., Ch.B.Vict., Shafton House, Holbeck, Leeds.
1909. Laurie, James, M.B., Ch.M.Glasg. (*Medical Officer, Smithston Asylum*), Red House, Ardgowan Street, Greenock.
1902. Laval, Evariste, M.B., C.M.Edin., The Guildhall, Westminster, S.W.
1898. Lavers, Norman, M.D.Bru., M.R.C.S., L.R.C.P.Lond., Medical Superintendent, Bailbrook House, Bath.
1899. Law, Charles D., L.R.C.P.&S.Edin., L.R.F.P.S., 117, Wilderspool Road, Warrington.
1892. Lawless, George Robert, F.R.C.S.I., L.R.C.P.I., Medical Superintendent, District Asylum, Armagh.
1870. Lawrence, Alexander, M.A., M.D., C.M.Aberd., 26, Hough Green, Chester.
1883. Layton, Henry A., M.R.C.S.Eng., L.R.C.P.Edin., Podington, near Wellingborough.
1909. Leech, John Frederick Wolseley, M.D., B.Ch.Dubl., County Asylum, Devizes, Wilts.
1899. Leeper, Richard R., F.R.C.S.I., M.P.C., Medical Superintendent, St. Patrick's Hospital, Dublin. (*Hon. Sec. to the Irish Division from 1911.*)
1883. Legge, Richard J., M.D., R.U.I., L.R.C.S.Edin., Medical Superintendent, County Asylum, Mickleover, Derby.
1906. Leggett, William, B.A., M.D., B.Ch.Dubl., Assistant Medical Officer, Royal Asylum, Sunnyside, Montrose.
1894. Lentaigne, Sir John, B.A., F.R.C.S.I., L.R.C.P.I., Medical Visitor of Lunatics to the Court of Chancery, 42, Merrion Square, Dublin.
1863. Ley, H. Rooke, M.R.C.S.Eng., Beaulieu, Westly Road, Boscombe, Hants.
1914. Lindsay, David George, L.R.C.P., L.R.C.S.Edin., Senior Assistant Medical Officer, Dundee District Asylum, West Green, Dundee.
1908. Littlejohn, Edward Salteine, M.R.C.S., L.R.C.P.Lond., Senior Assistant Medical Officer, London County Asylum, Cane Hill, Surrey.
1903. Logan, Thomas Stratford, L.R.C.P.&S.Edin., L.R.F.P.S.Glas., D.P.H., Stone Asylum, Aylesbury, Bucks.
1898. Lord, John R., M.B., C.M.Edin., Medical Superintendent, London County Asylum, Horton, Epsom. (*Co-Editor of Journal since 1911; Assistant Editor of Journal, 1900-11.*)
1906. Lowry, James Arthur, M.D., M.B., B.Ch., R.U.I., Medical Superintendent, Surrey County Asylum, Brookwood.
1904. Lyall, C. H. Gibson, L.R.C.P.&S.Edin., Leicester Borough Asylum, Leicester.
1872. Lyle, Thomas, M.D., C.M.Glasg., 34, Jesmond Road, Newcastle-on-Tyne.
1906. Macarthur, John, M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, Colney Hatch Asylum, London, N.
1899. Macartney, William H. C., L.R.C.P.&S.I., Riverhead House, Sevenoaks.
1880. MacBryan, Henry C., L.R.C.P. & S. Edin., Kingsdown House, Box, Wilts.
1900. McClintock, John, L.R.C.P.&S.Edin., Resident Medical Superintendent, Grove House, Church Stretton, Salop.
1900. McConaghey, John C., M.D., Ch.B.Edin., Medical Superintendent, Parkside Asylum, Macclesfield, Cheshire.

1901. MacDonald, James H., M.B., Ch.R., F.R.F.P.S.Glasg., Govan District Asylum, Hawkhead, Paisley, N.B.
1884. MacDonald, P. W., M.D., Ch.M.Aberd., Medical Superintendent, Dorset County Asylum, Herrison, Dorchester. (*First Hon. Sec. S.W. Division* 1894 to 1905.) (PRESIDENT, 1907-8.)
1911. MacDonald, Ranald, M.D., Ch.B.Edin., Assistant Medical Officer, London County Asylum, Bexley, Kent.
1905. MacDonald, William Fraser, M.B., Ch.B.Edin., M.P.C., 96, Polworth Terrace, Edinburgh.
1905. McDougall, Alan, M.D., Ch.B.Vict., M.R.C.S., L.R.C.P.Lond., Medical Director, The David Lewis Colony, Sandle Bridge, near Alderley Edge, Cheshire.
1911. McDougall, William, M.A., M.B., B.C.Cantab., M.Sc.Vict., Foxcombe Hill, Oxford.
1906. McDowall, Colin Francis Frederick, M.D., B.S.Durh., Ticehurst House, Ticehurst.
1870. McDowall, Thomas W., M.D.Edin., L.R.C.S.E., Medical Superintendent, Northumberland County Asylum, Morpeth. (PRESIDENT, 1897-8.)
1893. Macevoy, Henry John, B.A.(Dunai), M.D., B.Sc.Lond., M.R.C.S.Eng., L.R.C.P.Lond., M.P.C., 19, Mowbray Road, Brondesbury, London, N.W.
1895. Macfarlane, Neil M., M.D., C.M.Aber., Medical Superintendent, Government Hospital, Thlotse Heights, Leribe, Basutoland, South Africa.
1883. Macfarlane, W. H., M.B. and Ch.B.Univ. of Melbourne, Medical Superintendent, Hospital for the Insane, New Norfolk, Tasmania.
1902. McGregor, John, M.B., Ch.B.Edin., Senior Assistant Medical Officer, County Asylum, Bridgend, Glam.
1906. MacIlraith, Alex. Robert MacIntyre, L.R.C.P.&S.Edin., L.R.F.P.S.Glasg., Holly House, Rawtenstall, Lancs.
1905. MacIlraith, William MacLaren, L.R.C.P. & S.Edin., L.R.F.P.S.Glasg., L.D.S., Holly House, Rawtenstall, Lancs.
1914. Mackey, Magnus Ross, M.D., Ch.B.Edin., Inverness District Asylum.
1899. McKelvey, Alexander Niel, L.R.C.P.&S.I., Costley House, Epsom, Auckland, New Zealand.
1910. McKenzie, Ivy, M.A., B.Sc., M.B., Ch.B.Glasg., 10, Woodside Terrace, Glasgow.
1911. Mackenzie, John Cosserat, M.B., Ch.B.Edin., County Mental Hospital, Burntwood, near Lichfield.
1891. Mackenzie, Henry J., M.B., C.M.Edin., M.P.C., Assistant Medical Officer, The Retreat, York.
1908. Mackenzie, Theodore Charles, M.D., Ch.B., F.R.C.P.Edin., M.P.C., Medical Superintendent, District Asylum, Inverness.
1914. Macleod, J. R., L.R.C.P.&S.Edin., L.R.F.P.S.Glasg., 7, Mayfield Gardens, Edinburgh.
1904. Macnamara, Eric Danvers, M.A.Camb., M.D., B.C., F.R.C.P.Lond., 54, Welbeck Street, W.
1898. Macnaughton, George W. F., M.D., F.R.C.S.Edin., M.R.C.P.Lond., M.P.C., 33, Lower Belgrave Street, Eaton Square, London, S.W.
1914. Macneill, Celia Mary Colquhoun, M.B., Ch.B.Edin., Pathologist, Northfield, Prestonpans.
1910. MacPhail, Hector Duncan, M.A., M.D., Ch.B.Edin., Assistant Medical Officer, City Asylum, Gosforth, Newcastle-on-Tyne.
1882. Macphail, S. Rutherford, M.D., C.M.Edin., Derby Borough Asylum, Rowditch, Derby.
1896. Macpherson, Charles, M.D.Glas., L.R.C.P.&S., D.P.H.Edin., Deputy Commissioner in Lunacy, 15, Rutland Square, Edinburgh.
1901. McRae, G. Douglas, M.D., C.M.Edin., F.R.C.P.Ed., Medical Superintendent, District Asylum, Ayr, N.B.
1902. Macrae, Kenneth Duncan Cameron, M.B., Ch.B.Edin., Bangour Village, Dechmont, Linlithgowshire.
1894. McWilliam, Alexander, M.A., M.B., C.M.Aber., Waterval, Odiham, Winchfield, Hauts.

1915. Mansfold, Robert Fenton, M.B., D.Ch.Dub., Senior Assistant Medical Officer, Denbigh Asylum, North Wales.
1908. Mapother, Edward, M.D., B.S.Lond., F.R.C.S.Eng., Assistant Medical Officer, London County Asylum, Long-Grove, Epsom.
1903. Marnan, John, B.A., M.B., B.Ch.Dubl., Senior Assistant Medical Officer, Second County Asylum, Gloucester.
1896. Marr, Hamilton C., M.D., C.M.Glasg., F.R.F.P.S., M.P.C., Commissioner in Lunacy, 46, Murrayfield Avenue, Edinburgh. (*Hon. Sec. Scottish Division*, 1907-1910.)
1913. Marshall, Robert, M.B., Ch.B.Glas., Assistant Medical Officer, Gartloch Mental Hospital, Gartcosh, N.B.
1905. Marshall, Robert Macnab, M.D., Ch.B.Glasg., M.P.C., 2, Clifton Place, Glasgow.
1908. Martin, Henry Cooke, M.B., Ch.B.Edin., Assistant Medical Officer, Newport Borough Asylum, Caerleon.
1896. Martin, James Charles, L.R.C.S. & P.I., J.P., Assistant Medical Officer, District Asylum, Letterkenny, Donegal.
1908. Martin, James Ernest, M.B., B.S.Lond., M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, London County Asylum, Long-Grove, Epsom.
1907. Martin, Mary Edith, L.R.C.P.&S.Edin., L.R.F.G.S.Glas., L.S.A.Lond., M.P.C.Lond., Bailbrook House, Bath.
1914. Martin, Samuel Edgar, M.B., B.Ch.Edin., Barrister-at-Law, Senior Assistant Medical Officer, St. Andrew's Hospital, Northampton.
1911. Martin, William Lewis, M.A., B.Sc., M.B., C.M.Edin., D.P.H., M.P.C., Dipl. Psych. (*Certifying Physician in Lunacy, Edinburgh Parish Council*), 56, Bruntsfield Place, Edinburgh.
1911. Mathieson, James Moir, M.B., Ch.B.Aber., Assistant Medical Officer, Wadsley Asylum, Sheffield.
1904. May, George Francis, M.D., C.M.McGill, L.S.A., Winterton Asylum, Ferryhill, Durham.
1890. Menzies, William F., M.D., B.Sc.Edin., M.R.C.P.Lond., Medical Superintendent, Stafford County Asylum, Cheddleton, near Leek.
1891. Mercier, Charles A., M.D.Lond., F.R.C.P., F.R.C.S.Eng., late Lecturer on Insanity, Westminster Hospital; Moorcroft, Parkstone, Dorset. (*Secretary Educational Committee*, 1893-1905. *Chairman do. from* 1905-12.) (*PRESIDENT*, 1908-9.)
1877. Merson, John, M.A., M.D., C.M.Aber., Medical Superintendent, Borough Asylum, Hull.
1871. Mickle, William Julius, M.D., F.R.C.P.Lond., 69, Linden Gardens, Bayswater, W. (*PRESIDENT*, 1896-7.)
1893. Middlemass, James, M.A., M.D., C.M., B.Sc.Edin., F.R.C.P., M.P.C., Medical Superintendent, Borough Asylum, Ryhope, Sunderland.
1910. Middlemiss, James Ernest, M.R.C.S.Eng., L.R.C.P.Lond., Reginald House, 131, North Street, Leeds.
1883. Miles, George E., M.R.C.S., L.R.C.P.Lond., Medical Superintendent, British Empire Club, St. James's Square, S.W.
1887. Miller, Alfred, M.B., B.Ch.Dubl., Medical Superintendent, Hatton Asylum, Warwick. (*Registrar since* 1902.)
1904. Miller, James Webster, M.B., Ch.B.Aberd., Wonford House, Exeter.
1911. Miller, Margaret Mair, M.B., Ch.B.Edin., Assistant Medical Officer, Northumberland County Asylum, Morpeth.
1912. Miller, Fleet-Surgeon Richard, *R.N.*, M.B., B.Ch.Dubl., Medical Superintendent, Naval Hospital, Great Yarmouth.
1893. Mills, John, M.B., B.Ch., Dipl. Ment. Dis., R.U.I., District Asylum, Ballinasloe, Ireland.
1913. Milner, Ernest Arthur, M.B., C.M.Edin., Assistant Medical Officer, Royal Albert Institution, Lancaster.
1881. Mitchell, Richard Blackwell, M.D., C.M.Edin., Medical Supt., Midlothian District Asylum.
1911. Moll, Jan. Marius, Doc. in Arts and Med, Utrecht Univ., L.M.S.S.A. Lond., M.P.C., West Koppies Asylum, Pretoria, S. Africa.

1913. Molyneux, Benjamin Arthur, B.A., M.D., B.Ch.Dubl., County Asylum, Gloucester.
1910. Monnington, Richard Caldicott, M.D., Ch.B., D.P.H.Edin., Darenth Industrial Colony, Dartford, Kent.
1914. Montgomery, Edwin, F.R.C.S.I., L.R.C.P.I. Dipl. Psych. Manch., Prestwich Asylum, Lancs.
1878. Moody, Sir James M., M.R.C.S.Eng., L.R.C.P.Edin., Medical Superintendent, County Asylum, Cane Hill, Coulsdon, Surrey.
1911. Moon, George Bassett, L.R.C.P. & S.Edin., L.R.F.P.S.Glasg., Assistant Medical Officer, Surrey County Asylum, Netherne.
1885. Moore, Edw. E., M.D., B.Ch.Dubl., M.P.C., Medical Superintendent, District Asylum, Letterkenney, Ireland.
1899. Moore, Wm. D., M.D., M.Ch.R.U.I., Medical Superintendent, Holloway Sanatorium, Virginia Water, Surrey.
1914. Morres, Frederick, M.R.C.S.Eng., L.R.C.P.Lond., Assistant Medical Officer, Cane Hill Asylum, Coulsdon, Surrey.
1892. Morrison, Cuthbert S., L.R.C.P. & S.Edin., Medical Superintendent, County and City Asylum, Burghill, Hereford.
1896. Morton, W. B., M.D.Lond., M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, Wonford House, Exeter.
1896. Mott, F. W., M.D., B.S., F.R.C.P.Lond., LL.D.Edin., F.R.S., 25, Nottingham Place, W.
1896. Mould, Gilbert E., M.R.C.S., L.R.C.P.Lond., The Grange, Rotherham, Yorks.
1897. Mould, Philip G., M.R.C.S.Eng., L.R.C.P.Lond., Overdale, Whitefield, Manchester.
1914. Moyes, John Murray, M.B., Ch.B.Edin., D.P.M.Leads, Crichton Royal Institution, Dumfries.
1907. Mules, Bertha Mary, M.D., B.S.Durh., Court Hall, Kenton, S. Devon.
1911. Munro, William Thompson, M.D., C.B.Edin., Westgate, Friockheim, Forfarshire.
1911. Muncaster, Anna Lilian, M.B., B.Ch.Edin., Buchnall House, Stoke-on-Trent.
1893. Murdoch, James William Aitken, M.B., C.M.Glasg., Medical Superintendent, Berks County Asylum, Wallingford.
1909. Myers, Charles Samuel, M.A., D.Sc., M.D., B.C.Cantab., M.R.C.S., L.R.C.P.Lond., Great Shelford, Cambridgeshire.
1903. Navarra, Norman, M.R.C.S., L.R.C.P.Lond., City of London Mental Hospital, near Dartford, Kent.
1910. Neill, Alexander W., M.D., Ch.B.Edin., Warneford Mental Hospital, Oxford.
1903. Nelis, William F., M.D.Durh., L.R.C.P.Edin., L.R.F.P.S.Glasg., Medical Superintendent, Newport Borough Asylum, Caerleon, Mon.
1873. Newington, H. Hayes, F.R.C.P.Edin., M.R.C.S.Eng., The Gables, Ticehurst, Sussex. (*Chairman Parliamentary Committee, 1896-1904.*) (PRESIDENT, 1889.) (*Treasurer since 1894.*)
1909. Nicoll, James, M.D., C.M.Edin., D.P.H.Lond., Woodside, King's Langley, R.S.O., Herts.
1869. Nicolson, David, C.B., M.D., C.M.Aber., M.R.C.P.Edin., F.S.A.Scot., 201, Royal Courts of Justice, Strand, W.C. (PRESIDENT, 1895-6.)
1893. Nobbs, Athelstane, M.D., C.M.Edin., Layton House, Putney, S.W.
1888. Nolan, Michael J., L.R.C.P.&S.I., M.P.C., Medical Superintendent, District Asylum, Downpatrick.
1913. Nolan, James Noël Green, M.B., B.Ch., A.B.Dub., The Hospital, Hellingly Asylum, Sussex.
1909. Norman, Hubert James, M.B., Ch.B., D.P.H.Edin., Assistant Medical Officer, Camberwell House Asylum, S.E.
1885. Oakshott, James A., M.D., M.Ch.R.U.I., Medical Superintendent, District Asylum, Waterford, Ireland.

1903. O'Doherty, Patrick, B.A., M.B., B.Ch.R.U.I., District Asylum, Omagh.
1914. O'Flynn, Dominick Thomas, L.R.C.P. & S.I., Assistant Medical Officer, County Asylum, Hanwell, Middlesex.
1901. Ogilvy, David, B.A., M.D., B.Ch.Dub., Medical Superintendent, London County Asylum, Long Grove, Epsom, Surrey.
1910. Oldershaw, George Francis, M.D., Ch.B.Liverp., D.P.H., M.P.C., Deputy Medical Officer, H.M. Prison; and 3, Church Road, Walton, Liverpool.
1911. Oliver, Norman H., M.R.C.S., L.R.C.P.Lond., Charmouth Lodge, Richmond, Surrey.
1892. O'Mara, Francis, L.R.C.P.&S.I., District Asylum, Ennis, Ireland.
1886. O'Neill, Edward D., M.R.C.P.I., L.R.C.S.I., Medical Superintendent, The Asylum, Limerick.
1868. Orange, William, C.B., M.D.Heidelb., F.R.C.P.Lond., M.R.C.S.Eng., 11, Marina Court, Bexhill-on-Sea. (PRESIDENT, 1883.)
1902. Orr, David, M.D., C.M.Edin., M.P.C., Pathologist, County Asylum, Prestwich, Lancs.
1910. Orr, James H. C., M.D., Ch.B.Edin., Rosslyn Lee Asylum, Midlothian.
1899. Osburne, Cecil A. P., F.R.C.S., L.R.C.P.Edin., The Grove, Old Catton, Norwich.
1914. Osburne, John C., M.B., B.Ch.Dubl., Assistant Medical Officer, Lindville, Cork.
1890. Oswald, Landel R., M.B., C.M.Glasg., M.P.C., Physician Superintendent, Royal Asylum, Gartnavel, Glasgow.
1905. Paine, Frederick, M.D.Bru., M.R.C.S., L.R.C.P.Lond., Claybury Asylum, Woodford Bridge, Essex.
1907. Parker, James, L.R.C.P.&S.I., St. Stephen's Villa, North Strand, Limerick.
1898. Parker, William Arnot, M.B., C.M.Glasg., M.P.C., Medical Superintendent, Gartloch Asylum, Gartcosh, N.B.
1898. Pasmore, Edwin Stephen, M.D., M.R.C.P.Lond., Chelsham House, Chelsham, Surrey.
1899. Patrick, John, M.B., Ch.B., R.U.I., Medical Superintendent, Tyrone Asylum, Ireland.
1892. Patterson, Arthur Edward, M.D., C.M.Aber., M.P.C., Senior Assistant Medical Officer, City of London Asylum, Dartford.
1907. Peachell, George Ernest, M.D., B.S.Lond., M.R.C.S., L.R.C.P.Lond., M.P.C., Medical Superintendent, County Asylum, Newport, I. of W.
1903. Pearce, Francis H., M.A., M.B., B.C.Cantab., M.R.C.S., L.R.C.P.Lond., M.P.C., Shirlett Sanatorium, Broseley, Shropshire.
1910. Pearn, Oscar Phillips Napier, M.R.C.S., L.R.C.P., L.S.A.Lond., Assistant Medical Officer, London County Asylum, Horton, Epsom.
1913. Penny, Robert Augustus Greenwood, M.R.C.S., L.R.C.P.Lond., Devon County Asylum, Exminster.
1893. Perceval, Frank, M.R.C.S.Eng., L.R.C.P.Lond., Medical Superintendent, County Asylum, Prestwich, Manchester. Lancashire.
1911. Perdrau, Jean René, M.B., B.S.Lond., M.R.C.S., L.R.C.P., Senior Assistant Medical Officer and Pathologist, Dorset County Asylum, Dorchester.
1911. Petrie, Alfred Alexander Webster, M.D., B.S.Lond., Ch.B., F.R.C.S. Edin., Assistant Medical Officer, Epileptic Colony, Epsom.
1878. Philipps, Sutherland Rees, M.D., C.M.Q.U.I., F.R.G.S., 62, Upper Kennington Lane, S.E.
1875. Philipson, Sir George Hare, M.A., M.D.Cantab., D.C.L., LL.D., F.R.C.P. Lond., 7, Eldon Square, Newcastle-on-Tyne.
1908. Phillips, John George Porter, M.D., B.S.Lond., M.R.C.S., L.R.C.P.Lond., Resident Physician and Superintendent, Bethlem Royal Hospital. Lambeth, S.E. (*Secretary of Educational Committee since 1912.*)

1910. Phillips, John Robert Parry, M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, City Asylum, Bristol.
1906. Phillips, Nathaniel Richard, M.D.Brux., M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, County Asylum, Abergavenny, Monmouthshire.
1905. Phillips, Norman Routh, M.D.Brux., M.R.C.S., L.R.C.P.Lond., St. Andrew's Hospital, Northampton.
1891. Pierce, Bedford, M.D., F.R.C.P.Lond., Medical Superintendent, The Retreat, York. (*Hon. Secretary N. and M. Division 1900-8.*)
1888. Pietersen, J. F. G., M.R.C.S., L.R.C.P.Lond., Ashwood House, Kingswinford, near Dudley, Stafford.
1896. Planck, Charles, M.A.Camb., M.R.C.S.Eng., L.R.C.P.Lond., Medical Superintendent, Brighton County and Borough Asylum, Haywards Heath.
1912. Plummer, Edgar Curnow, M.R.C.S., L.R.C.P.Lond., Medical Superintendent, Laverstock House, Salisbury.
1889. Pope, George Stevens, L.R.C.P.&S.Edin., L.R.F.P.S.Glasg., Medical Superintendent, Somerset and Bath Asylum, "Westfield," near Wells, Somerset.
1913. Potts, William A., M.A.Camb., M.D.Edin.&Birm., M.R.C.S., L.R.C.P.Lond., Consulting Medical Officer to the National Association for the Feeble-minded, 118, Hagley Road, Birmingham.
1876. Powell, Evan, M.R.C.S.Eng., L.S.A., Medical Superintendent, Borough Lunatic Asylum, Nottingham.
1910. Powell, James Farquharson, M.R.C.S., L.R.C.P., D.P.H.Lond., Assistant Medical Officer, The Asylum, Caterham, Surrey.
1912. Power, Pierce M. J., L.R.C.P. & S.I., Lieut. R.A.M.C.
1908. Prentice, Reginald Wickham, L.M.S.S.A.Lond., Beauworth Manor, Alresford, Hants.
1904. Pringle, Archibald Douglas, M.B., Ch.B.Aberd., Government Asylum, Pietermaritzburg, Natal, South Africa.
1901. Pugh, Robert, M.D., Ch.B.Edin., Medical Superintendent, Brecon and Radnor Asylum, Talgarth, S. Wales.
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1904. Race, John Percy, M.R.C.S., L.R.C.P., L.S.A.Lond., Winterton Asylum, Ferryhill, Durham.
1913. Rae, Harry James, M.A., M.B., Ch.B.Aber., Kingseat Mental Hospital, New Machar, Aberdeen.
1899. Rainsford, F. E., M.D., B.A.Dubl., L.R.C.P.I., L.R.C.P.&S.E., Resident Physician, Stewart Institute, Palmerston, co. Dublin.
1894. Rambaut, Daniel F., M.A., M.D., B.Ch.Dub., St. Andrews, Northampton.
1910. Rankine, Surg. Roger Aiken, R.N., M.B., B.S., M.R.C.S., L.R.C.P.Lond., M.P.C.
1889. Raw, Nathan, M.D., B.S.Durh., L.S.Sc., F.R.C.S.Edin., M.R.C.P.Lond., M.P.C., 66, Rodney Street, Liverpool.
1893. Rawes, William, M.D.Durh., F.R.C.S.Eng., Medical Superintendent, St. Luke's Hospital, Old Street, London, E.C.
1870. Rayner, Henry, M.D.Aberd., M.R.C.P.Edin., 16, Queen Anne Street, London, W. (*PRESIDENT, 1884.*) (*General Secretary, 1878-89.*) (*Co-Editor of Journal 1895-1911.*)
1913. Read, Charles Stanford, M.B.Lond., M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, Fisherton House, Salisbury.
1903. Read, George F., L.R.C.S.&P.Edin., Hospital for the Insane, New Norfolk, Tasmania.
1899. Redington, John, F.R.C.S.&L.R.C.P.I., Portrane Asylum, Donabate, Co. Dublin.
1911. Reeve, Ernest Frederick, M.B., B.S.Lond., M.R.C.S., L.R.C.P.Lond., Senior Assistant Medical Officer, County Asylum, Rainhill, Lancs.
1911. Reid, Daniel McKinley, M.D., Ch.B.Glasg., Royal Asylum, Gartnavel, Glasgow.
1910. Reid, William, M.A.St. And., M.B., Ch.B.Edin., Senior Assistant Medical Officer, Burntwood Asylum, Lichfield.

1887. Reid, William, M.D., C.M.Aberd., Physician Superintendent, Royal Asylum, Aberdeen.
1886. Revington, George T., M.A., M.D., B.Ch.Dubl., M.P.C., Medical Superintendent, Central Criminal Asylum, Dundrum, Ireland.
1907. Reynolds, Ernest Septimus, B.Sc.Vict., M.D., F.R.C.P.Lond., M.R.C.S.Eng., 2, St. Peter's Square, Manchester.
1899. Rice, David, M.D.Brux., M.R.C.S., L.R.C.P., D.P.H., Medical Superintendent, City Asylum, Hillesdon, Norwich.
1897. Richard, William J., M.A., M.B., Ch.M.Glasg., Medical Officer, Govan Parochial Asylum, Merryflats, Govan.
1899. Richards, John, M.B., C.M.Edin., F.R.C.S.E., Medical Superintendent, Joint Counties Asylum, Carmarthen.
1911. Robarts, Henry Howard, M.D., Ch.B.Edin., D.P.H.Glasg., Ennerdale, Haddington, Scotland.
1914. Roberts, Ernest Theophilus, M.D., C.M.Edin., D.P.H.Camb., 129, Bath Street, Glasgow.
1903. Roberts, Norcliffe, M.D., B.S.Durh., Senior Assistant Medical Officer, Horton Asylum, near Epsom, Surrey.
1887. Robertson, Geo. M., M.D., C.M., F.R.C.P.Edin., M.P.C., Physician-Superintendent, Royal Asylum, Morningside, Edinburgh.
1908. Robertson, George Dunlop, L.R.C.S.&P.Edin., Dipl. Psych., Assistant Medical Officer, District Asylum, Hartwood, Lanark.
1910. Robertson, Jane I., M.B., Ch.B.Glasg., c/o Masson, 31, Lacrosse Terrace, Glasgow; and The Ivyleaf, Linnavady, Ireland.
1895. Robertson, William Ford, M.D., C.M.Edin., 60, Northumberland Street, Edinburgh.
1900. Robinson, Harry A., M.D., Ch.B.Vict., 56, West Derby Street, Liverpool.
1911. Robson, Capt. Hubert Alan Hirst, *I.M.S.*, M.R.C.S., L.R.C.P.Lond., c/o Messrs. Grindlay, Groome, Bombay, India.
1914. Rodger, Murdoch Mann, M.D., Ch.B.Glas., Second Assistant Medical Officer, Cardiff Mental Hospital, Whitechurch, Glamorganshire.
1908. Rodgers, Frederick Millar, M.D., Ch.B.Vict., D.P.H., Senior Medical Officer, County Asylum, Winwick, Lancs.
1908. Rolleston, Charles Frank, B.A., M.B., Ch.B.Dub., Assistant Medical Officer, County of London, Manor Asylum, Epsom.
1895. Rolleston, Lancelot W., M.B., B.S.Durh., Medical Superintendent, Middlesex County Asylum, Napsbury, near St. Albans.
1899. Rorie, George Arthur, M.D., Ch.B.Edin., M.P.C., 163, Princes Street, Dundee.
1888. Ross, Chisholm, M.D.Syd., M.B., C.M.Edin., 151, Macquarie Street, Sydney, New South Wales.
1913. Ross, Derind Maxwell, M.B., Ch.B.Edin., Morningside Asylum, Edinburgh.
1910. Ross, Donald, M.B., Ch.B.Edin., Argyll and Bute Asylum, Lochgilphead.
1905. Ross, Sheila Margaret, M.D., Ch.B.Edin., Assistant Medical Officer of Health, 42, Carill Drive, Fallowfield, Manchester.
1899. Rotherham, Arthur, M.A., M.B., B.C.Cantab., Commissioner under Ment. Defec. Act, Board of Control, 66, Victoria Street, Westminster, S.W.
1906. Rowan, Marriott Logan, B.A., M.D.R.U.I., Assistant Medical Officer, Derby County Asylum, Mickleover.
1884. Rowe, Edmund L., L.R.C.P.&S.Edin., Medical Superintendent, Borough Asylum, Ipswich.
1883. Rowland, E. D., M.B., C.M.Edin., The Public Hospital, George Town, Demerara, British Guiana.
1902. Rows, Richard Gundry, M.D.Lond., M.R.C.S., L.R.C.P.Lond., Pathologist, County Asylum, Lancaster.
1877. Russell, Arthur P., M.B., C.M., M.R.C.P.Edin., The Lawn, Lincoln.
1912. Russell, John Ivison, M.B., Ch.B.Glasg., West Riding Asylum, Storthes Hall, Kirkburton, Huddersfield.
1912. Rutherford, Cecil, M.B., B.Ch.Dubl., Assistant Medical Officer, Holloway Sanatorium, Virginia Water, Surrey.

1907. Rutherford, Henry Richard Charles, F.R.C.S.I., L.R.C.P.I., D.P.H., St. Patrick's Hospital, James's St., Dublin.
1896. Rutherford, James Mair, M.B., C.M., F.R.C.P. Edin., M.P.C., Brislington House, Bristol.
1913. Ryan, Ernest Noel, B.A., M.D., B.Ch. Dub., *R.A.M.C.*, 6th London Field Ambulance (T.).
1902. Sall, Ernest Frederick, M.R.C.S. Eng., L.R.C.P. Lond., Medical Superintendent, Borough Asylum, Canterbury.
1908. Samuels, William Frederick, L.M. & L.S. Dubl., Medical Superintendent, Central Asylum, Tangong, Rambutan, Federated Malay States.
1894. Sankey, Edward H. O., M.A., M.B., B.C. Cantab., Resident Medical Licensee, Boreatton Park Licensed House, Baschurch, Salop.
- * Sankey, R. H. Heurtley, M.R.C.S. Eng., 3, Marston Ferry Road, Oxford.
1873. Savage, Sir Geo. H., M.D., F.R.C.P. Lond., 26, Devonshire Place, W. (*Late Editor of Journal.*) (PRESIDENT, 1886.)
1906. Scanlan, John J., L.R.C.P. & S. Edin., L.R.F.P.S. Glasg., D.P.H., 1, Castle Court, Cornhill, E.C.
1896. Scott, James, M.B., C.M. Edin., 98, Baron's Court Road, West Kensington, W.
1889. Scowcroft, Walter, M.R.C.S., L.R.C.P.I., Medical Superintendent, Royal Lunatic Hospital, Cheadle, near Manchester.
1911. Scroope, Geoffrey, M.B., B.Ch. Dub., Assistant Medical Officer, Central Asylum, Dundrum.
1880. Seccombe, George S., M.R.C.S., L.R.C.P. Lond., c/o Messrs. H. S. King and Co., 65, Cornhill, E.C.
1906. Sephton, Robert Poole, B.A. Cantab., M.R.C.S., L.R.C.P. Lond., County Lunatic Asylum, Lancaster.
1912. Sergeant, John Noel, M.B., B.S. Lond., M.R.C.S., L.R.C.P. Lond., Medical Superintendent, Newlands House, Tooting Bec Common, S.W. (*Secretary South-Eastern Division from 1913.*)
1882. Seward, William J., M.B. Lond., M.R.C.S. Eng., 15, Chandos Avenue, Oakleigh Park, N.
1913. Shand, George Ernest, M.B., Ch.B. Aberdeen, Capt., *R.A.M.C.* (S.R.).
1901. Shaw, B. Henry, M.B., B.Ch. R.U.I., Assistant Medical Officer, County Asylum, Stafford.
1909. Shaw, Capt. William Samuel J., M.B., B.Ch. R.U.I., *I.M.S.*, Superintendent, c/o Messrs. Grindlay & Co., 54, Parliament Street, London, S.W.
1905. Shaw, Charles John, M.D., Ch.B., F.R.C.P.E., Medical Superintendent, Royal Asylum, Montrose.
1904. Shaw, Patrick, L.R.C.P. & S. Edin., Senior Medical Officer, Hospital for the Insane, Kew, Victoria, Australia.
1909. Shepherd, George Ferguson, F.R.C.S., L.R.C.P. Irel., D.P.H., 9, Ogle Terrace, South Shields.
1900. Shera, John E. P., M.D. Brux., L.R.C.P. & S. Irel., Somerset County Asylum, Wells, Somerset.
1912. Sheridan, Gerald Brinsley, M.B., B.Ch. R.U.I., Assistant Medical Officer, Portrane Asylum, Dublin.
1914. Sherlock, Edward Burball, M.D., B.Sc., D.P.H. Lond., Medical Superintendent, Darenth Industrial Colony, Dartford.
1914. Shield, Hubert, M.B., B.S. Durh., Assistant Medical Officer, Gateshead Borough Asylum, Stannington, Newcastle-on-Tyne.
1877. Shuttleworth, George E., B.A. Lond., M.D. Heidelb., M.R.C.S. and L.S.A. Lond., 8, Lancaster Place, Hampstead, N.W.
1901. Simpson, Alexander, M.A., M.D., C.M. Aber., Medical Superintendent, County Asylum, Winwick, Newton-le-Willows, Lancashire.
1905. Simpson, Edward Swan, M.D., Ch.B. Edin., East Riding Asylum, Beverley, Yorks.
1888. Sinclair, Eric, M.D., C.M. Glasg., Inspector-General of Insane, Richmond Terrace, Demain, Sydney, N.S.W.

1891. Skeen, James Humphry, M.B., Ch.M.Aber., Medical Superintendent, Kirklands Asylum, Bothwell.
1912. Skene, Leslie Henderson, M.B., Ch.B.Edin., Dipl. Psych., Assistant Medical Officer, Hartwood Asylum, Lanarkshire.
1900. Skinner, Ernest W., M.D., C.M.Edin., J.P., Mountsfield, Rye, Sussex.
1914. Slaney, Chas. Newnham, M.R.C.S., L.R.C.P.Lond., Deputy Medical Officer, H.M. Prison Service, Avenue Lodge, Parkhurst, I.W.
1901. Slater, George N. O., M.D.Lond., M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, Essex County Asylum, Brentwood.
1897. Smalley, Sir Herbert, M.D.Durh., M.R.C.S., L.R.C.P.Lond., Prison Commission, Home Office, Whitehall, S.W.
1910. Smith, Gayton Warwick, M.D.Lond., B.S.Durh., D.P.H.Cantab., M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, Middlesex County Asylum, Tooting, S.W.
1905. Smith, George William, M.B., Ch.B.Edin., Holloway Sanatorium, Virginia Water, Surrey.
1907. Smith, Henry Watson, M.D., Ch.B.Aberd., Medical Superintendent, Lebanon Hospital for the Insane, Asfurujeh, near Beyrout, Syria.
1899. Smith, John G., M.D., C.M.Edin., Herts County Asylum, Hill End, St. Albans, Herts.
1885. Smith, R. Percy, M.D., B.S., F.R.C.P.Lond., M.P.C., 36, Queen Anne Street, Cavendish Square, W. (*General Secretary*, 1896-7. *Chairman Educational Committee*, 1899-1903.) (*PRESIDENT*, 1904-5.)
1913. Smith, Thomas Cyril, M.B., B.Ch.Edin., County Asylum, Gloucester.
1911. Smith, Thomas Waddelow, F.R.C.S., L.R.C.P.Lond., M.P.C., Assistant Medical Officer, Wonford House, Exeter.
1884. Smith, W. Beattie, F.R.C.S.Edin., L.R.C.P.Edin., M.P.C., 4, Collins Street, Melbourne, Victoria.
1914. Smith, Walter H., B.A., M.D., B.Ch.Dub., Senior Assistant Medical Officer, County Asylum, Shrewsbury.
1903. Smith, William Maule A., M.D., Ch.B.Edin., M.R.C.P.Edin., M.P.C., 98, Dagger Lane, West Bromwich.
1901. Smyth, Robt. B., M.A., M.B., Ch.B.Dubl., Medical Superintendent, County Asylum, Gloucester.
1899. Smyth, Walter S., M.B., B.Ch.R.U.I., Assistant Medical Officer, County Asylum, Antrim.
1913. Somerville, Henry, B.Sc., M.R.C.S., L.R.C.P.Lond., F.C.S., Harrold, Sharnbrook, Bedfordshire.
1885. Soutar, James Greig, M.B., C.M.Edin., M.P.C., Medical Superintendent, Barnwood House, Gloucester. (*PRESIDENT*, 1912-13.)
1906. Spark, Percy Charles, M.R.C.S., L.R.C.P.Lond., Medical Superintendent, London County Asylum, Banstead, Surrey.
1875. Spence, J. Beveridge, M.D., M.C.Q.U.I., Medical Superintendent, Burntwood Asylum, near Lichfield. (*First Registrar*, 1892-1899; *Chairman Parliamentary Committee*, 1910-12.) (*PRESIDENT*, 1899-1900.)
1913. Spensley, Frank Oswald, M.R.C.S., L.R.C.P.Lond., Senior Medical Officer, Darenth Asylum, Dartford, Kent.
1891. Stansfield, T. E. K., M.B., C.M.Edin., Medical Superintendent, London County Asylum, Bexley, Kent.
1901. Starkey, William, M.B., B.Ch.R.U.I., Assistant Medical Officer, Lancashire County Asylum, Prestwich, near Manchester.
1907. Steele, Patrick, M.D., Ch.B., M.R.C.P.Edin., Assistant Medical Officer, Bangour Village, Dechmont, Linlithgowshire.
1898. Steen, Robert H., M.D.Lond., Medical Superintendent, City of London Asylum, Stone, Dartford. (*Hon. Sec. S.E. Division*, 1905-10.)
1914. Stephens, Harold Freize, M.R.C.S.Lond., L.R.C.P.Eng., Earlswood Asylum, Redhill.
1914. Stevenson, George Henderson, M.B., Ch.B.Edin., D.P.H.Lond., Joyce Green Hospital, Dartford, Kent.

1912. Stevenson, William Edward, M.B., B.S.Durh., Senior Assistant Medical Officer, City and County Asylum, Hereford.
1909. Steward, Sidney John, M.D., B.C.Cantab., M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, Langton Lodge, Farncombe, Surrey.
1868. Stewart, James, B.A.Belf., F.R.C.P.Ed., L.R.C.S.I., Killydonnell, 28, Glebe Road, Barnes, S.W.
1913. Stewart, Ronald, M.B., Ch.B.Glasg., Gartlock Asylum, Gartcosh, Glasgow.
1887. Stewart, Rothsay C., M.R.C.S.Eng., L.S.A.Lond., Medical Superintendent, County Asylum, Narborough, near Leicester.
1914. Stewart, Roy M., M.B., Ch.B.Edin., Assistant Medical Officer, County Asylum, Prestwich.
1905. Stilwell, Henry Francis, L.R.C.P.&S.E., Hayes Park, Hayes, Middlesex.
1899. Stilwell, Reginald J., M.R.C.S., L.R.C.P.Lond., Moorcroft House, Hillingdon, Middlesex.
1897. Stoddart, William Henry Butter, M.D., B.S., F.R.C.P.Lond., M.R.C.S. Eng., M.P.C., 19, Cavendish Square, W. (*Hon. Sec. Educational Committee, 1908-1912.*)
1909. Stokes, Frederick Ernest, M.B., Ch.B.Glasg., D.P.H.Cantab., Assistant Medical Officer, Borough Asylum, Portsmouth.
1905. Strathearn, John, M.D., Ch.B.Glasg., F.R.C.S.E., 23, Magdalen Yard Road, Dundee.
1903. Stratton, Percy Haughton, M.R.C.S., L.R.C.P.Lond., 10, Hanover Square, W.
1885. Street, C. T., M.R.C.S., L.R.C.P.Lond., Haydock Lodge, Ashton, Newton-le-Willows, Lancashire.
1908. Stuart, Francis Arthur Knox, B.A.Cantab., L.S.A.Lond., Assistant Medical Officer, West Sussex Asylum, Chichester.
1909. Stuart, Frederick J., M.R.C.S., L.R.C.P.Lond., Senior Assistant Medical Officer, Northampton County Asylum, Berrywood.
1900. Sturrock, James Prain, M.A.St.And., M.D., C.M.Edin., 25, Palmerston Place, Edinburgh.
1886. Suffern, Alex. C., M.D., M.Ch.R.U.I., Medical Superintendent, Ruberry Hill Asylum, near Bromsgrove, Worcestershire.
1894. Sullivan, William C., M.D., B.Ch.R.U.I., Rampton Criminal Lunatic Asylum, South Leverton, Lincolnshire.
1910. Sutherland, Joseph Roderick, M.B., Ch.B.Glasg., M.R.C.S., L.R.C.P., D.P.H., County Sanatorium, Stonehouse, Lanarkshire.
1877. Swanson, George I., M.D.Edin., 23, St. Mary's, York.
1908. Swift, Eric W. D., M.B.Lond., Medical Superintendent, Government Asylum, Bloemfontein.
1908. Tattersall, John, M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, London County Asylum, Hanwell, W.
1910. Taylor, Arthur Loudoun, B.Sc., M.B., Ch.B., M.R.C.P.Edin., Senior Assistant Medical Officer, Hawkhead Asylum, Paisley.
1897. Taylor, Frederic Ryott Percival, M.D., B.S.Lond., M.R.C.S.Eng., L.R.C.P.Lond., Medical Superintendent, East Sussex Asylum, Hellingly.
1908. Thomas, Joseph D., B.A., M.B., B.C.Cantab., Northwoods House, Winterbourne, Bristol.
1911. Thomas, William Rees, M.D., B.S.Lond., M.R.C.S., M.R.C.P.Lond., M.P.C., Mosside, Maghull, near Liverpool.
1880. Thomson, David G., M.D., C.M.Edin., Medical Superintendent, County Asylum, Thorpe, Norfolk. (*PRESIDENT, 1914-15.*)
1903. Thomson, Herbert Campbell, M.D., F.R.C.P.Lond., Assist. Physician, Middlesex Hospital, 34, Queen Anne Street, W.
1905. Tidbury, Robert, M.D., M.Ch. R.U.I., Heathlands, Foxhall Road, Ipswich.
1901. Tighe, John V. G. B., M.B., B.Ch.R.U.I., Medical Superintendent, Gateshead Mental Hospital, Stannington, Northumberland.
1914. Tisdall, C. J., M.B., Ch.B., Crichton Royal Institution, Dumfries.

1903. Topham, J. Arthur, B.A.Cantab., M.R.C.S., L.R.C.P.Lond., County Asylum, Chartham, Kent.
1896. Townsend, Arthur A. D., M.D., B.Ch.Birm., M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, Hospital for Insane, Barnwood House, Gloucester.
1904. Treadwell, Oliver Fereira Naylor, M.R.C.S.Eng., L.S.A.Lond., 102, Belgrave Road, S.W.
1903. Tredgold, Alfred F., M.R.C.S., L.R.C.P.Lond., 6, Dapdune Crescent, Guildford, Surrey.
1908. Tuach-MacKenzie, William, M.D., Ch.B.Aberd., Medical Superintendent, Royal and District Asylums, Dundee.
1881. Tuke, Charles Molesworth, M.R.C.S.Eng., Chiswick House, Chiswick.
1888. Tuke, John Batty, M.D., C.M., F.R.C.P.Edin., Resident Physician, Saughton Hall, Edinburgh; Linden Lodge, Loanhead, Midlothian.
1885. Tuke, T. Seymour, M.A., M.B., B.Ch.Oxon., M.R.C.S.Eng., Chiswick House, Chiswick, W.
1877. Turnbull, Adam Robert, M.B., C.M.Edin., Fife and Kinross District Asylum, Cupar. (*Hon. Secretary for Scottish Division, 1894-1901.*) (PRESIDENT-ELECT, 1909-10.)
1906. Turnbull, Peter Mortimer, M.B., B.Ch.Aberd., Tooting Bec Asylum, Tooting, S.W.
1909. Turnbull, Robert Cyril, M.D.Lond., M.R.C.S., L.R.C.P.Lond., Medical Superintendent, Essex County Asylum, Colchester.
1889. Turner, Alfred, M.D., C.M.Edin., Plympton House, Plympton, S. Devon.
1906. Turner, Frank Douglas, M.B.Lond., M.R.C.S., L.R.C.P.Lond., Medical Officer, Royal Eastern Counties Institution, Colchester.
1890. Turner, John, M.B., C.M.Aberd., Medical Superintendent, Essex County Asylum, Brentwood.
1878. Urquhart, Alex. Reid, M.D., LL.D.Edin., F.R.C.P.E. (retired and traveling), James Murray's Royal Asylum, Perth. (*Co-Editor of Journal, 1894-1910.*) (*Hon. Sec. for Scottish Division, 1886-94.*) (PRESIDENT, 1898-9.)
1904. Vincent, George A., M.B., B.Ch.Edin., Assistant Medical Superintendent, St. Ann's Asylum, Trinidad, B.W.I.
1894. Vincent, William James N., M.B., B.S.Durh., M.R.C.S., L.R.C.P.Lond., Medical Superintendent, Wadsley Asylum, near Sheffield.
1914. Vining, Charles Wilfred, M.D., B.S.Lond., M.R.C.P.Lond., D.P.H., Assistant Physician, Leeds General Infirmary, 40, Park Square, Leeds.
1911. Waldron, Ethel Annie, M.B., Ch.B.Birm., Dipl. Psych., Assistant Medical Officer, West Riding Asylum, Wakefield.
1913. Walford, Harold R.S., M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, Kent County Asylum, Barming Heath, Maidstone.
1914. Walker, Ernest Haines, M.R.C.S.Eng., L.R.C.P.Lond., Assistant Medical Officer, East Sussex County Asylum, Hellingly, Sussex.
1914. Walker, Robert Clive, M.B., Ch.B.Edin., West Riding Asylum, Menston, near Leeds.
1908. Wallace, John Andrew Leslie, M.D., Ch.B.Edin., M.P.C., The Hospital, Gladesville, Sydney, N.S.W.
1912. Wallace, Vivian, L.R.C.P. & S.I., Assistant Medical Officer, Mullingar District Asylum, Mullingar.
1889. Warnock, John, M.D., C.M., B.Sc.Edin., Medical Superintendent, Abbasiyeh Asylum, nr. Cairo, Egypt.
1910. Waters, John Patrick F., B.A., M.B., Ch.B., R.U.I., Assistant Medical Officer, County Asylum, Melton, Suffolk.
1895. Waterston, Jane Elizabeth, M.D.Brux., L.R.C.P.I., L.R.C.S.Edin., M.P.C., 85, Parliament Street, Box 78, Cape Town, South Africa.

1902. Watson, Frederick, M.B., C.M.Edin., The Grange, East Finchley, London, N.
1891. Watson, George A., M.B., C.M.Edin., M.P.C., Lyons House, Rainhill, Liverpool.
1908. Watson, H. Ferguson, M.D., Ch.B.Glas., L.R.C.P.&S.E., L.F.P.S.Glas., Northcote, Edinburgh Road, Perth.
1885. Watson, William Riddell, L.R.C.S.&P.Edin., 3, Tufnell House, Anson Road, Tufnell Park, N.
1910. Watson, William Scott, M.D., Ch.B.Edin., c/o Mental Hospital Dept., Government Buildings, Wellington, New Zealand.
1911. White, Edward Barton C., M.R.C.S., L.R.C.P.Lond., Senior Assistant Medical Officer, Cardiff City Mental Hospital, Whitchurch.
1884. White, Ernest William, M.B.Lond., M.R.C.P.Lond., Betley House, nr. Shrewsbury. (*Hon. Sec. South-Eastern Division, 1897-1900.*) (*Chairman Parliamentary Committee, 1904-7.*) (*PRESIDENT 1903-4.*)
1905. Whittington, Richard, M.A., M.D.Oxon., M.R.C.S., L.R.C.P.Lond., Downford, Montpelier Road, Brighton.
1889. Whitwell, James Richard, M.B., C.M.Edin., Medical Superintendent, Suffolk County Asylum, Melton Woodbridge.
1903. Wigan, Charles Arthur, M.D.Durh., M.R.C.S.Eng., L.S.A.Lond., Deepdene, Portishead, Somerset.
1883. Wiglesworth, Joseph, M.D., F.R.C.P.Lond., Springfield House, Winscombe, Somerset. (*PRESIDENT, 1902-3.*)
1913. Wilkins, William Douglas, M.B., Ch.B.Vict., M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, Winwick Asylum, Warrington.
1900. Wilkinson, H. B., M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer Plymouth Borough Asylum, Blackadon, Ivybridge, South Devon.
1887. Will, John Kennedy, M.A., M.D., C.M.Aberd., M.P.C., Bethnal House, Cambridge Road, N.E.
1914. Williams, Charles, L.R.C.P.&S.Edin., L.S.A.Lond., Assistant Medical Officer, The Warneford, Oxford.
1907. Williams, Charles E. C., M.A., M.D., B.Ch.Dubl., Assistant Medical Officer, Holloway Sanatorium, Virginia Water, Surrey; Greystones, Canford Cliff, Bournemouth.
1905. Williams, David John, M.R.C.S., L.R.C.P.Lond., Medical Superintendent, The Asylum, Kingston, Jamaica.
1912. Wilson, Samuel Alexander Kinneir, M.A., M.D., B.Sc.Edin., M.R.C.P.Lond., Registrar, National Hospital, Queen's Square, 14, Harley Street, W.
1897. Winder, W. H., M.R.C.S., L.R.C.P.Lond., D.P.H.Cantab., Deputy Medical Officer, H.M. Convict Prison, Aylesbury.
1875. Winslow, Henry Forbes, M.D.Lond., M.R.C.P.Lond., M.R.C.S.Eng., 164, Marine Parade, Brighton.
1899. Wolseley-Lewis, Herbert, M.D.Bruce, F.R.C.S.Eng., L.R.C.P.Lond., Medical Superintendent, Kent County Asylum, Barming Heath, Maidstone. (*Secretary Parliamentary Committee, 1907-12. Chairman since 1912.*)
1869. Wood, T. Outterson, M.D.Durh., M.R.C.P.Lond., F.R.C.P., F.R.C.S. Edin., 7, Abbey Crescent, Torquay. (*PRESIDENT, 1905-6.*)
1912. Woods, James Cowan, M.B., B.S.Lond., M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, The Priory, Roehampton.
1885. Woods, J. F., M.D.Durh., M.R.C.S.Eng., 7, Harley Street, Cavendish Square, W.
1912. Wootton, John Charles, M.R.C.S.Eng., L.R.C.P.Lond., Assistant Medical Officer, Cane Hill Asylum, Surrey.
1900. Worth, Reginald, M.B., B.S.Durh., M.R.C.S., L.R.C.P.Lond., Medical Superintendent, Middlesex Asylum, Tooting, S.W.
1862. Yellowlees, David, LL.D.Glas., M.D.Edin., F.R.F.P.S.Glas., 6, Albert Gate, Dowan Hill, Glasgow. (*PRESIDENT, 1890.*)

Members of the Association.

xxix

1914. Yellowlees, Henry, M.B., Ch.B.Glas., Craig House, Morningside Drive, Edinburgh.
 1910. Younger, Edward George, M.D.Bru.x., M.R.C.P., M.R.C.S., L.S.A.Lond., D.P.H., Physician to the Finsbury Dispensary, 2, Mecklenburgh Square, W.C.

ORDINARY MEMBERS	...	...	...	...	...	679
HONORARY MEMBERS	...	...	...	...	...	34
CORRESPONDING MEMBERS	...	...	...	...	...	18
Total						731

Members are particularly requested to send changes of address, etc., to Dr. M. Abdy Collins, the Honorary General Secretary, 11, Chandos Street, Cavendish Square, London, W., and in duplicate to the Printers of the Journal, Messrs. Adlard and Son, 23, Bartholomew Close, London, E.C.

OBITUARY.

Members.

1890. Alexander, Robert Reid, M.D., C.M.Aber., 38, Glenloch Road, Haverstock Hill, N.W.
 1909. Crowther, Sydney Nelson, M.R.C.S., L.R.C.P.Lond., Medical Superintendent-elect, Netherne County Asylum, Surrey (*killed in action*).
 1899. Donelan, Thomas O'Connor, L.R.C.P. & S.I., Middlesex County Asylum, Napsbury, near St. Albans, Herts.
 1890. Gaudin, Francis Neel, M.R.C.S.Eng., L.S.A., M.P.C., Medical Superintendent, The Grove, St. Lawrence, Jersey.
 1897. Mumby, Bonner Harris, M.D.Aber., D.P.H.Cantab., Medical Superintendent, Borough Asylum, Portsmouth.
 1880. Neil, James, M.D., C.M.Aberd., M.P.C., Medical Superintendent, Warneford Asylum, Oxford.
 1875. Newington, Alexander, M.B.Camb., M.R.C.S.Eng., Woodlands, Ticehurst.
 1891. Shaw, Harold B., B.A., M.B., B.C., D.P.H.Camb., Medical Superintendent, Isle of Wight County Asylum, Whitecroft, Newport, Isle of Wight.

List of those who have passed the Examination for the Certificate of Efficiency in Psychological Medicine, entitling them to append M.P.C. (Med.-Psych. Certif.) to their names.

- | | |
|---------------------------------|---------------------------|
| Adams, J. Barfield. | Conolly, Richard M. |
| Adamson, Robert O. | Conry, John. |
| Adkins, Percy, R. | Cook, William Stewart. |
| Ainley, Fred Shaw. | Cooper, Alfred J. S. |
| Ainslie, William. | Cope, George Patrick. |
| Alcock, B. J. | Corner, Harry. |
| Alexander, Edward H. | Cotton, William. |
| Anderson, A. W. | Couper, Sinclair. |
| Anderson, Bruce Arnold. | Cowan, John J. |
| Anderson, John. | Cowie, C. G. |
| Andriezen, W. | Cowie, George. |
| Apthorp, F. W. | Cowper, John. |
| Armour, E. F. | Cox, Walter H. |
| Attegalle, J. W. S. | 8 Craig, M. |
| Aveline, H. T. S. | Cram, John. |
| Ballantyne, Harold S. | Crills, G. H. |
| Barbour, William. | Cross, Edward John. |
| Barker, Alfred James Glanville. | Cruickshank, George. |
| Bashford, Ernest Francis. | Cullen, George M. |
| Bazalgette, S. | Cunningham, James F. |
| Begg, William. | Dalgetty, Arthur B. |
| Belben, F. | Davidson, Andrew. |
| Bird, James Brown. | Davidson, William. |
| Blachford, J. Vincent. | 6 Dawson, W. R. |
| Black, E. J. | De Silva, W. H. |
| Black, Robert S. | 11 Devine, H. |
| Black, Victor. | Distin, Howard. |
| Blackwood, John. | Dixon, J. F. |
| Blandford, Henry E. | Donald, Wm. D. D. |
| 7 Bond, C. Hubert. | Donaldson, R. L. S. |
| Bond, R. St. G. S. | Donelan, James O'Conor. |
| Bowlan, Marcus M. | Douglas, A. R. |
| Boyd, James Paton. | Downey, Augustine. |
| 13 Boyd, William | Drummond, Russell J. |
| Bradley, J. T. | Eager, Richard. |
| Bristowe, Hubert Carpenter. | Eames, Henry Martyn. |
| Brodie, Robert C. | Earls, James H. |
| Brough, C. | East, W. Norwood. |
| Brown, William. | Easterbrook, Charles C. |
| Browne, Hy. E. | Eden, Richard A. S. |
| Bruce, John. | Edgerley, S. |
| Bruce, Lewis C. | Edwards, Alex. H. |
| Brush, S. C. | Elkins, Frank A. |
| Bullock, William. | Ellis, Clarence J. |
| Calvert, William Dobree. | English, Edgar. |
| Cameron, James. | Eustace, J. N. |
| Campbell, Alex Keith. | Eustace, Henry Marcus. |
| Campbell, Alfred W. | Evans, P. C. |
| Campbell, Peter. | Ewan, John A. |
| Carmichael, W. J. | Ezard, Ed. W. |
| Carruthers, Samuel W. | Falconer, A. R. |
| Carter, Arthur W. | Falconer, James F. |
| Chambers, James. | Farquharson, Wm. Fredk. |
| Chambers, W. D. | Fennings, A. A. |
| Chapman, H. C. | Ferguson, Robert. |
| Christie, William. | Findlay, G. Landsborough. |
| Clarke, Robert H. | Fitzgerald, Gerald. |
| Clayton, Frank Herbert A. | Fleck, David. |
| Clayton, Thomas M. | Fortune, J. |
| Clinch, Thomas Aldous. | Fox, F. G. T. |
| Coles, Richard A. | Fraser, Donald Allan. |
| Collie, Frank Lang. | Fraser, Thomas. |
| Collier, Joseph Henry. | Frederick, Herbert John. |

- Gage, J. M.
 Gaudin, Francis Neel.
 Gawn, Ernest K.
 Gemmell, William.
 Genney, Fred. S.
 Gibb, H. J.
 Gibson, Thomas.
 Giles, A. B.
 Gill, J. Macdonald.
 Gilmour, John R.
 Goldie, E. M.
 Goldschmidt, Oscar Bernard.
 Goodall, Edwin.
 Gostwyck, C. H. G.
 Graham, Dd. James.
 Graham, F. B.
 Grainger, Thomas.
 Grant, J. Wemyss.
 Grant, Lacklan.
 Gray, Alex. C. E.
 Gray, Theodore G.
 Griffiths, Edward H.
 Haldane, J. R.
 Hall, Harry Baker.
 Halsted, H. C.
 Haslam, W. A.
 Haslett, William John Handfield.
 Hassell, Gray.
 Hector, William.
 Henderson, Jane B.
 Henderson, P. J.
 Hennan, George.
 Hewat, Matthew L.
 Hewitt, D. Walker.
 Hicks, John A., jun.
 Hitchings, Robert.
 Holmes, William.
 Horton, James Henry.
 Hotchkis, R. D.
 Howden, Robert.
 Hughes, Robert.
 Hunter, G. T. C.
 Hutchinson, P. J.
 2 Hyslop, Thos. B.
 Ingram, Peter R.
 Jeffery, G. R.
 Jagannadham, Annie W.
 Johnston, John M.
 Johnstone, Emma M.
 Keith, W. Brooks
 Kelly, Francis.
 Kelso, Alexander.
 Kelson, W. H.
 Ker, Claude B.
 Kerr, Alexander L.
 Keyt, Frederick.
 King, David Barty.
 King, Frederick Truby.
 Laing, C. A. Barclay.
 Laing, J. H. W.
 Law, Thomas Bryden.
 Leeper, Richard R.
 Leslie, R. Murray.
 Livesay, Arthur W. Bligh.
 Livingstone, John.
 Lloyd, R. H.
 Lothian, Norman V. C.
 Low, Alexander.
 McAllum, Stewart.
 Macdonald, David.
 Macdonald, G. B. Douglas.
 Macdonald, John.
 Macdonald, W. F.
 Macevoy, Henry John.
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 Mackenzie, John Cumming.
 Mackenzie, T. C.
 Mackenzie, William H.
 Mackenzie, William L.
 Mackie, George.
 McLean, H. J.
 Macmillan, John.
 5 Macnaughton, Geo. W. F.
 Macneice, J. G.
 Macpherson, John.
 Macvean, Donald A.
 Mallannah, Sreenagula.
 Marr, Hamilton C.
 Marsh, Ernest L.
 Marshall, R. M.
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 Martin, A. J.
 Martin, M. E.
 Martin, Wm. Lewis.
 Masson, James.
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 Melville, Henry B.
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 Nair, Charles R.
 Nairn, Robert.
 Neil, James.
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 Pearce, Francis H.
 Pearce, Walter.

- Penfold, William James.
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 Rice, P. J.
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 Rivers, W. H. R.
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 Rust, Montague.
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 Wilson, John T.
 Wilson, Robert.
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 Younger, Henry J.
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- 1 To whom the Gaskell Prize (1887) was awarded.
- 2 To whom the Gaskell Prize (1889) was awarded.
- 3 To whom the Gaskell Prize (1890) was awarded.
- 4 To whom the Gaskell Prize (1892) was awarded.
- 5 To whom the Gaskell Prize (1895) was awarded.
- 6 To whom the Gaskell Prize (1896) was awarded.
- 7 To whom the Gaskell Prize (1897) was awarded.
- 8 To whom the Gaskell Prize (1900) was awarded.
- 9 To whom the Gaskell Prize (1901) was awarded.
- 10 To whom the Gaskell Prize (1906) was awarded.
- 11 To whom the Gaskell Prize (1909) was awarded.
- 12 To whom the Gaskell Prize (1911) was awarded.
- 13 To whom the Gaskell Prize (1912) was awarded.
- 14 To whom the Gaskell Prize (1913) was awarded.

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Part I.—Original Articles.

The Position of Psychiatry and the Rôle of General Hospitals in its Improvement. The Introductory Address delivered at the Opening of the Winter Session, 1914–15, at the Middlesex Hospital on October 1st, 1914. By C. HUBERT BOND, D.Sc., M.D.Edin., M.R.C.P.Lond., Commissioner of the Board of Control, and Emeritus Lecturer in Psychiatry at Middlesex Hospital Medical School.

GENTLEMEN,—In the first place I desire to express my thanks to the council of the medical school for the honour they have done me in asking me to give the introductory address which is customary at the opening of each of our winter sessions. That I particularly esteem the privilege will be readily appreciated when I remind you of where we are gathered, and that this is the first function which has taken place in the Bland-Sutton Institute of Pathology, which, with its laboratory, lecture theatre, and museum, will always be a monument to Sir John Bland-Sutton's princely munificence, to his affection for the hospital and medical school, to his devotion to science, and to his belief in her power to relieve suffering humanity. And who will dare attempt to gauge the direct and indirect influence of this institute? Sir John's catholicity is well known, and I feel assured of his sympathy when I venture to hope that psychiatry, which is the branch of medicine in which my

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interests are specially centred, will have its fair share of the blessings that doubtless will be showered from this institute.

The pleasure of our gathering is, however, marred in one particular, for we have to lament the absence of His Serene Highness, Prince Alexander of Teck, whose active interest in all that pertains to the welfare of the hospital and medical school is so deeply appreciated, and whose presence we should have enjoyed to-day were it not that his military duties have made it impossible.

Few academic sessions can ever have opened amidst such momentous events as does the present one; and whatever diffidence I felt in accepting the responsibility of this year's address has not been diminished by the fact that I am conscious there are other members of the school's staff who would in all likelihood have chosen a theme more in consonance with the stirring events with which our thoughts are thrilled: indeed, realising that such a course would probably prove the more acceptable, I did make an attempt to recast the draft of my remarks, but, not unmindful of Pliny's injunction to the cobbler, and wishing to eschew anything like an "ultracrepidarian" reputation, I have harked back to my original purpose, which was to bring before your notice (A) the present position in which psychiatry stands; (B) the essential cause of this position; and (C) to endeavour to convince you that general hospitals—more particularly those to which medical schools are attached—can, if they choose, effect a material improvement therein.

However, before entering upon the subject-matter of my discourse, it appears to me not only fitting, but to be a duty, to emphasise the sincere sympathy which I am confident each one of us most deeply feels with those schools, colleges and seats of learning, whose important educational functions have been temporarily suspended owing to their position in the theatre of military operations, or by any indirect effects of the war. Especially do those feelings arise when we think of ruined Louvain. It was some consolation to read that, in connection with the University of Oxford, a strong committee has been formed with the intention of offering hospitality to the professors of Louvain and their families, and that a similar welcome to both teachers and students is being extended by the Universities of Cambridge and London. May we not hope that our several universities and other teaching centres

will find some means of offering, not only their educational machinery, but also their residential facilities to every Continental student who, robbed of corresponding opportunities in his own university, is able to take advantage of them? Such action on our part would in some instances be no more than the satisfaction of an actual debt we owe them, and it is not unreasonable to hope that in the case of every foreign student so received the indirect influence of a period of study in one of our colleges would be to the ultimate advantage of this country.

It may also be not inopportune to here record our pride at the whole-hearted and enthusiastic response which our universities and colleges have made to the call for recruits. Of observing these men's eager enthusiasm it happens that a specially favourable opportunity was afforded me, by reason of the fact that one of the chief recruiting centres for this class was in the building in which the offices of the Board of Control are situated. It is a satisfaction to know that in the case of those who have not completed their college curriculum steps have been taken to ensure that their academic careers will not be jeopardised by their absence on military duties. On the contrary, may we not take it as certain that it will tend to broaden their outlook of life and sharpen their powers of appreciation?

(A) PSYCHIATRY THE CINDERELLA OF MEDICINE.

Psychiatry, or by whatever other term you prefer to denote the study and treatment of mental diseases, has sometimes been characterised as the Cinderella of general medicine; that is to say, it has been alleged to be a branch which, compared with other medical subjects, lacks sustaining interest, and the study of which is apt to side-track its devotees into blind alleys where their scientific enthusiasm is chilled, and their legitimate aspirations to maintain an honourable position for themselves are disappointed. Now, while I can emphatically assert that any such description is very one-sided, and wholly untrue as respects the first part of the allegation, there is in its second part a modicum of truth which has, I believe, barred the way to many a young medical man who would otherwise have maintained his initial interest in the subject both

to its and his own advantage, and which therefore had better be clearly understood.

(a) *Wherein the Statement is not True.*

To refute the allegation that the study of psychiatry in any way lacks sustaining interest is not difficult. What student or medical man, possessed of his normal share of scientific inquisitiveness, has ever filled a resident post in an institution for the insane in which, affiliated to a medical school, teaching and research work go hand in hand with its administration, and has come away imbued with any such notion? I have never met him. On the contrary, if really necessary, it would be an easy task to demonstrate that the subject possesses an absorbing and, indeed, transcendent interest; that in its compass—not easy to define—its borders insensibly merge into those of other departments of general medicine; that in not a single medical or surgical case can the mental side of the patient be safely ignored; that the truth of this last fact—often forgotten—not infrequently comes home to the medical man in attendance with startling and unpleasant force; that without a sound knowledge of at least the elements of psychiatry such circumstances may cause him much embarrassment; and, lastly, that, to the medical man who is tempted to dive below the mere surface of the subject, there is a wealth of problems, each well deserving a life's devotion, whose non-solution impedes successful treatment, but whose elucidation may with confidence be expected to restore to a normal life many of those afflicted with the direst of human calamities, who, in the light, or rather the obscurity, of existing knowledge, are now too often doomed to premature death, or life-long segregation from their friends. And, of still greater moment to the public, there is good ground for believing that, with the removal of some of the perplexities with which the subject is at present strewn, not only will many a man and woman be able to ward off the necessity of such segregation, but also will the path of many a one be rendered smooth where now, by reason of the traveller's neuropathic oddities and obsessions, it is thorny, and often pursued only at a cost of much mental pain. The accomplishment of all this by no means spells a fresh goal. The problems which now await solution are, for

the most part, fresh hill-points which have come into view when the summit of others has been attained by the indefatigable labours of certain of our predecessors and *confrères* in the specialty. That they have been all too few and often ill requited is true enough, but in their accumulated observations they have left a heritage which is a veritable treasure house. In no other branch of medicine is the harvest whiter than in psychiatry, and I fain would persuade some of you who are about to enter the medical profession to come in and gather it.

(b) *The Allegation True in Two Counts.*

Wherein then, you will ask, is psychiatry even remotely deserving to be dubbed a Cinderella? The epithet is deserved, I fear, as respects two counts: (1) The unpopularity of the asylum medical service, and (2) the manner in which psychiatry's claims are overlooked by philanthropists. Both are, in my opinion, dependent primarily on the same cause.

(1) *The unpopularity of medical work in asylums.*—The first and probably most obvious count is the undeniable reluctance of young medical men and women to enter the specialty at all, or, at any rate, to enter it with a view to applying themselves seriously to it as their life's work. Certain it is that at the present moment public asylums—even those most favourably situated—find it increasingly hard to obtain suitable candidates from which to fill vacancies in the junior ranks of their medical staffs; so acute has been the difficulty that, at a large asylum in a medical staff comprising a superintendent and six assistants, I have known as many as three of the latter positions to be filled at the same time by locum-tenents—in other words, by men between whom and the institution the link is so small that it can be severed at a week's notice. No one will deny that such a position of affairs is a menace to the present and future welfare of any such institution; it is highly desirable that this should be realised by the public in whose hands, mainly through their municipal representatives, the remedy largely lies.

(i) *Causes of this unpopularity.*—The task of exposing and grappling with the difficulty has within the last three years been undertaken by a committee of the Medico-Psychological Association, and is set forth in an admirable and comprehensive report which will be found in this month's⁽¹⁾ number of the *Journal of*

Mental Science. This report is all the more weighty, and should the more commend itself to the public, because, whilst nowhere in it are the interests of the patients subordinated to those of the medical men, there is, with a due claim for the pecuniary advancement of some of the latter, a *pari passu* demand for increased opportunities for adequate initial training and future study and research. The subject is also dealt with at some length in the Sixty-eighth Report (pp. 40, 41) of the Commissioners in Lunacy, which was published this year. No doubt the paucity of applications for these by no means unimportant and not ill-paid asylum posts is to some extent due to the large increase in the number of available public health appointments (whether as medical officers of health, school medical officers, or tuberculosis officers), to the passing of the Insurance Act, and to the improvements effected in the medical departments of the Royal Navy and the Army.

But the difficulty is of too long standing to be explained by those three factors, though it is they, doubtless, that have rendered it acute; otherwise it might be left to right itself on the principle of supply and demand. Nor, while refraining from any expression of opinion as to the merits or demerits of the suggestion that public asylums (which are at present managed by local authorities) should all be linked up to form one common service, do I believe that the adoption of that policy would of necessity render asylum work more popular as a career for medical men.

The crux of the situation lies in the fact that with the gradual increase in the number of medical appointments in the specialty, consequent upon the steady growth in the number of public asylums, the proportion, which the number of posts justly regarded as "plums"—offering an assured, independent, and satisfactorily remunerated position—bears to the number of subordinate and hitherto far from assured positions, has unfortunately become less and less. Time was when most public asylums were small institutions, medically staffed by a superintendent and one assistant: the latter's status was comparable to that of a house physician; quite equitably only bachelor's quarters were provided for him; he was looked upon as a bird of passage, and as such regarded himself. Additions have, however, been made so persistently to asylums that now, out of the 97 existing county and borough asylums in England

and Wales—providing between them more than 300 medical posts—no less than 40 contain over 1000 patients, and of these in about 14 the number is more than 2000, while only 16 contain less than 500 patients. Manifestly, with such a great augmentation in the size of asylums, the number of medical officers who, for the safety of the institution, must be regarded as permanent officials has largely increased, but in the meanwhile custom has—I venture to suggest, needlessly and unwisely—decreed that the position of those officials should remain much as it was when asylums were small units; so that, while in former days 50 *per cent.* of asylum medical appointments were coveted and assured positions, the same can now be said of scarcely 30 *per cent.* In other words, the junior's aphorism that "the assistant medical officer of to-day is the superintendent of to-morrow" is lamentably untrue. Were it always a fact, the present shortage in applicants would never have arisen; but to express the truth we cannot go farther than to say that the "superintendent of to-day is the assistant medical officer of yesterday."

(ii) *To overcome the unpopularity.*—But if I have hitherto painted to you the darker side of asylum service, I am entitled to show you its brighter aspect, and it has one. In the first place, the disabilities of the service, some of which I have indicated, are recognised and admitted as evils. That is a great step, and it is gratifying to add that, not only have several local authorities substantially mitigated them by granting:

(a) *Increases in salaries, and the provision of separate houses for assistant medical officers*, lending hope to our being within measurable distance of seeing the principle accepted that no resident male official in our asylums, whose services it is desired in the interests of the institution to retain over a series of years, shall be debarred either from marriage or from other social advantages, including a reasonable independence of position; but also a healthy spirit has arisen calling for evidence of greater scientific training in the specialty on the part of those practising in it, as witnessed by:

(b) *The institution of diplomas in psychiatry* by the Universities of Durham, Edinburgh, Manchester, Leeds, and Cambridge (enumerated in the order in which they adopted this step). Besides which mention may be made of the fact that in London and at the four Scottish Universities psychiatry is

now a branch in which the degree of Doctor in Medicine may be obtained. The institution of these diplomas is a recognition of a movement of probably far-reaching importance, and it is not an exaggeration to say that it marks an epoch in the progress of psychiatry. That they will become registrable by the General Medical Council is a further step which I venture to hope will not be long delayed. Some of you are conversant with the beneficial effects upon the sanitary service of the country which followed upon the enactment of the compulsory holding of diplomas in public health ; and many of us believe that similar benefits would flow from a like policy in the case of the diplomas in psychiatry: not, of course, that it is in the mere possession of diplomas that their potency resides, but rather in the knowledge and systematic study of which they are the hall-mark. The existence of these diplomas has already emphasised the pressing need for :

(c) *The establishment of psychiatric clinics.* The fact that one, to which I shall have occasion again to refer, will shortly be at work in the metropolis under the ægis of the London County Council is a matter for earnest congratulation ; and not less satisfactory is the recent erection at Cambridge of laboratories for the prosecution of experimental psychology. May the time rapidly come when these institutions will no longer stand out as oases, when there will be none of our medical schools which will not be in possession of both of them, and when none of our towns of any magnitude is lacking the former. The evolution of these clinics is one of the directions towards which it is of paramount importance to secure not only the sympathy but also the active intervention of general hospitals. Such clinics would enable the study of the various branches of psychiatry and psychology to be co-ordinated into a well articulated scheme, embracing ante- as well as post-graduate study ; and would be the means of securing, as is much to be desired—

(d) *A more satisfactory position for psychiatry in the medical curriculum.* Few, if any, teachers in psychiatry can be satisfied with the position that their subject occupies in the medical curriculum. The compulsory attendance on four-fifths of twelve systematic lectures in the school, and twelve clinical demonstrations at a recognised institution for the insane, is what is usually demanded of the medical student. The subject enjoys the

distinction—some will say an enviable one, and there is much to be said for their contention—of being the only compulsory one in which (as respects by far the majority of qualifying examinations) the student is not examined. Far be it from me to advocate yet another addition to the student's trials by examination ; but it does seem to me anomalous that, of all courses which the student is called on to attend, he is exempt from any proof of competent knowledge in the one with which the liberty of the subject is so intimately involved. Either the certificates of attendance on the course (which is now compulsory) should include satisfactory evidence of knowledge attained, and work done, as well as mere attendances, or the final examination in medicine, both written and clinical, should always include a test as to the candidate's knowledge of mental diseases.

Adverting for a moment to the nature of this course—of all subjects, the teaching of mental diseases is one which lends itself rather to clinical methods than to systematic lectures ; and freedom should be given to the teacher to proportion the time between the methods according to circumstances. But that privilege would go only a small way towards adequate reform ; for as matters now and would still stand, the clinical demonstrations necessarily all take place in institutions removed from the medical school—commonly at a considerable distance, though sometimes, it is true, comparatively near at hand. In either event the student sees only certified cases of insanity, and for the most part cases in which the stage of the malady is considerably advanced. He learns something of the classification of mental diseases, of the diagnosis of the forms as they are presented to him in the asylum, and of their treatment, and is instructed in the mode of filling in certificates of mental unsoundness. This is all to the good, and I should strongly deprecate the abandonment of asylum clinical demonstrations. But what he almost wholly misses is an opportunity of seeing those borderland and incipient cases, with the difficult technique of whose examination he should have, if not a familiarity, at least an acquaintance—that is, if he is to be competent to render that spiritual aid, which, without encroaching on the province of the priest, is more and more expected of medical men ; for they it is, as said the Dean of St. Paul's at the last International Medical Congress, who now hear the con-

fessions of anxious and conscience-stricken patients. If it is pardonable to glance at the commercial aspect of the question, I have no hesitation in saying that on ability or inability to deal with these cases will often depend the retention of a family in the doctor's general practice. Moreover, under existing arrangements, the student's access to cases of mental disorder is usually limited to a weekly visit, whereas it cannot be denied that of all branches of clinical medicine the student of mental disease should have, under proper supervision, free and daily access to a mental ward and mental out-patient department.

For the realisation of these aspirations, I would again repeat that we must enlist the interest and energetic co-operation of general hospitals, and in this direction I need hardly say that, to my mind, the establishment at Middlesex Hospital of a special department for nervous diseases was a very bright omen, even limited as it at present is to out-patients, though the addition of beds to it would, I am sure, materially add to its sphere of usefulness.

(iii) *Advice to entrants into asylum service.*—Before quitting the subject of the present unpopularity of asylum service I should like to express, firstly, my conviction that, with the recognition that has already taken place of some of the existing drawbacks, the neck of the difficulty has been broken; and secondly, and speaking with a full sense of responsibility, my hope that, despite any warnings he may have heard, no student of this school who is willing to work hard and apply himself seriously to the study of psychiatry as a branch in which to specialize, will be deterred from following his bent. If I may be permitted to offer a word of counsel, I would, however, advise him to be cautious in his method of procedure, and especially not to let considerations of *£. s. d.*—important though they are—be the only nexus between himself and his choice of place. After serving the usual term as house physician he would be well advised to endeavour to attach himself to an asylum affiliated to a medical school, whence, after an adequate period of study and training, and after making sure he has attended all the courses obligatory for one of the diplomas in psychiatry, he can migrate to other institutions which, though perhaps less favourably situated, offer advantages in salary and promotion. No such aspirant for reputation in psychiatry need, I am convinced, fear being side-tracked, and even if he

does not ultimately reach the position of superintendent—and not every military officer becomes a general nor every naval officer an admiral, or even a captain—he will be able to present claims to an honourable and assured position which cannot be disregarded.

(2) *Psychiatry's claims overlooked by philanthropists.*—Though the pecuniary recompense paid to the actual toilers after knowledge is too often slender, and in the nature of a pittance, the progress of science, nevertheless, owes much to the liberality of wealthy benefactors. To criticise the direction of their benevolence would be a sorry and ungrateful act. Rather, did time permit, would I enumerate all the endowments that have been made in recent years to the various departments of medical research. Such a catalogue, while redounding to the credit of the donors, would serve my purpose by emphasising a patent hiatus that most assuredly deserved to be filled in. For at any rate during the twenty years in which I have been connected with the specialty, with one exception, conspicuous as well by its solitariness as by its munificence and far-sighted policy—I refer to the Maudsley Hospital in course of erection—I cannot call to mind any donations or legacies which have had for their object the endowment of psychiatric research in this country.

This is the second count in which I suggest psychiatry is indeed and undeservedly the Cinderella of medicine. By no manner of means can this cold shoulder which she receives be explained by any lack of problems of interest; nor would it be difficult to supplement a list of them with chapter and verse of the immediate benefits that might be expected to flow from their solution. It is to be doubted, however, if such a recital, even though entrusted to a master in oratory, would be as moving as knowledge gathered by personal observation—who sees with the eye, believes with the heart—and there is no little sagacity in the dictum that “you cannot convert a man unless you persuade him he is obeying the dictates of his own heart.”

For that and other reasons it is a misfortune that so slender a proportion of ratepayers, particularly of their *intelligenza*, ever visit and make themselves personally acquainted with the ninety-seven asylums which their money provides, and wherein are maintained some 105,000 patients. Many of these insti-

tutions are situated in country districts away from the throb of active life, and except for the visits they receive from official visitors, and from the friends of a proportion (often too small) of the patients, they are left severely alone—verily, out of sight, out of mind. And what would the intelligent ratepayer learn? Speaking generally, he would be amply satisfied with all he saw, and that his money was being economically and humanely spent; he would, moreover, be gratified to learn that rather more than 30 *per cent.* of direct admissions to these institutions are ultimately discharged as recovered. Here and there he would be impressed by centres of serious effort to unravel, with an energy deserving of the highest praise, the perplexities which surround the cause and treatment of mental affections. His interest aroused, as it inevitably would be, particularly if it were backed by some knowledge of the intensive methods of research, and their cost in other branches of medical science, he would begin to inquire into what relation the sums spent on psychiatric research bear to the cost of the patient's maintenance. He would probably be a little staggered to learn that the latter (not even including the cost of repairs to fabric and other capital charges) is well over two and three-quarter million pounds a year; but with what derision and almost incredulity would he hear that, at a liberal estimate, it would be hard to show that even so insignificant a fraction as 0.2 *per cent.* of this sum is spent in organised scientific research?

It is, however, a fact of much significance and one very pleasing to chronicle, that quite lately the Government has set apart, to be distributed by the Board of Control, the sum of £1500 to be spent in each year in the encouragement of the investigation of mental defect in the broadest sense of that expression—thereby setting the imprimatur of the State upon the claims of psychiatry. This recognition, and the advent of the Maudsley Hospital, are bright streaks which, it is to be hoped, herald the dawn of a brighter day for Medicine's Cinderella.

(B) CAUSE OF PRESENT POSITION OF PSYCHIATRY.

The essential cause of the present position of psychiatry has its roots in the past, and is undoubtedly the divorce that has been decreed between it and other departments of medicine. This is due to the prevailing custom, not only of treating the majority of cases of mental disorder in institutions devoted

solely to that end, but also of refusing to admit such cases to general hospitals. This custom is not new, for we have records of the existence, as far back as the year 1400, for example, of a small establishment at Charing Cross, and another at Barking, for at least the segregating, if not the treatment, of a few insane persons; and it probably owes its origin to the failure to realise that many morbid mental symptoms are due to the same pathological conditions as are the symptoms of other systemic diseases. That "a precedent embalms a principle" has surely been exemplified here, and nowhere, I should imagine, with more disastrous results; more particularly has the custom retarded progress in the case of those areas which have the good fortune to possess within them a university—with which intimate co-ordination of research workers, in lieu of the mischievous and wasteful system of segregation, could have been sought.

It cannot, I admit, be gainsaid that, at least superficially, there are serious differences between cases of mental disorder and cases ordinarily regarded as eligible for admission to the wards of a general hospital. Though each of these differences presents difficulties of its own, I cannot agree either that any one of them ought to be allowed to be a ban on the patient's entrance into a general hospital, or even that all of them in conjunction constitute any insuperable obstacle. On the contrary, I urge that the time has come when they should cease to be permitted to encompass a gulf, almost indeed as "profound as that Serbonian bog," which has so long separated the treatment of mental from other forms of disorder.

(C) WHEREIN CAN GENERAL HOSPITALS BENEFIT PSYCHIATRY?

General hospitals can benefit psychiatry by bridging over the gulf to which I have just alluded; and this, I submit, could be effected by the establishment in general hospitals of mental wards, with corresponding out-patient departments. In the case of hospitals in association with medical schools they would naturally assume the form of full psychiatric clinics.

Specialism in General Hospitals.

Specialism in general hospitals has most assuredly come to stay, and though some deprecate its triumph, they may at least

take comfort from the fact that in its birth it was the twin of the inevitable complexity born of the progress made by medical science. The tendency to build special and independent hospitals for this and that disorder seems, and I think happily, to be on the wane. This has been effected by the response made by general hospitals to the demands of specialism ; and now many a large hospital strives to have under its own roof departments for all the specialties that have arisen—wards for diseases of the eye, of the nose and throat, of the ear, of the skin, for nervous diseases, for genito-urinary diseases, for cancer, children's wards, maternity wards, and a dental department. But the gamut is incomplete, for if there is one department that, willy-nilly, has been dubbed a specialty, it is psychiatry. Yet in our own country, so far as I am aware, not a single general hospital can boast a psychiatric clinic in the full sense of the term.

The debt that the public owes to general hospitals and to their medical staffs, who gratuitously and so lavishly give their time, would indeed be hard to compute. It sits lightly on the shoulders of most of those who use those institutions, because they are ignorant of the work that goes on within their walls ; they regard the cure of their malady as an empirical procedure. It is only the more enlightened that have any glimmering of the fact that each case is a new problem ; that its history, course, and result are laboriously recorded, and are subsequently not pigeon-holed as dust collectors, but classified to form a living library for reference in future cases.

Consciousness of this debt, and desire not to be presumptuous, make one hesitate in any way to criticise ; but, if I may be forgiven using a somewhat hackneyed quotation, I will take leave to say to general hospitals, and to throw into my question a spice of reproach, "Canst *thou* not minister to a mind diseased ?" I am convinced they can if they will.

The Psychiatric Clinic.

Mental wards in general hospitals are not an entirely modern conception. There may have been other examples ; but it is certain that in the year 1724, when Guy's Hospital was established, its founder stipulated that insane persons discharged from certain other general hospitals were to be received ; and

in 1797 a special "House" in connection with the hospital was built which continued to receive insane patients down to the year 1859. That it was not a success, and that, down to its abolition, the then Commissioners in Lunacy pressed for its removal into the country, are facts which have sometimes been put forward as evidence against the soundness of the principle. But the further fact should be noted that it was expressly stated that the twenty cases, which this mental ward was to accommodate, were to be all certified as incurable ; and it is indisputable, from the ward's annual returns, that it was not uncommon for a year to pass without any admissions, that discharges were few, and that apparently none were recorded as having recovered—surely the negation and antithesis of our conception of a psychiatric clinic.

The ideal psychiatric clinic has probably yet to be developed, and each new one should mark in its design progress in method of treatment. As regards this country it has as its prototype the admirable admission hospital which now exists as a detached unit in several of the county asylums. While brains are more important than bricks, no little cunning is nevertheless requisite in the actual design of the building : for, besides adequate out-patient rooms, it internally has to provide accommodation for every type of mental case, so arranged that no patient need be disturbed, alarmed, or suffer any shock by the behaviour of a fellow patient ; and withal, as much of the treatment in bed as possible should be capable of being in the open air. There must, moreover, be means of classifying the patients according to the stages they attain towards convalescence. Opportunity should be provided on a liberal scale of employing every known special form of treatment which experience teaches promotes mental recovery. Properly equipped clinical rooms for examination of patients on admission and afterwards are essential. Rooms adaptable for work in practical psychology should be included, and a certain amount of laboratory space would also be needful ; but as to the latter, the situation of the clinic, within, or in close proximity to, the curtilage of a general hospital, would enable advantage to be taken of existing laboratories.

That such an institute could prove a failure is as inconceivable as inestimable would be its benefits.

Out-patient departments.—As ancillary adjuncts to the wards,

mental out-patient departments would, of course, be a necessity, and of their power to stave off many a threatened mental breakdown I have not the shadow of a doubt. In the general hospitals attached to a few medical schools (among which is Middlesex Hospital) and in at least one public asylum they already exist; but I can see no reason why they should not be established in connection with every general hospital in the country, nor why the expert knowledge of the medical officers of institutions for the insane should not be freely available and utilized—that they would be readily given there need, I am sure, be no misgiving. Such out-patient departments, if they are to fulfil all the functions I have in view, should be attached to the general hospitals, and not to the asylums.

Mitigating the stigma of insanity.—Owing to much misunderstanding, both as to the liability to relapse, and on the question of the influence of heredity, a most unfortunate stigma attaches to a person known to have had a mental breakdown, especially if the case has been placed under legal certificates. Whilst wholly undeserved in a large proportion of cases, how real it is in the view of the public, and how powerfully it operates as a deterrent to prompt and efficacious treatment, only those of us who see these cases fully appreciate. No amount of preaching will stifle this sentiment; but the institution in general hospitals of the psychiatric unit, access to which could be obtained through the ordinary portals of the hospital, would be the most powerful factor possible in nullifying its evil influence.

Teaching facilities.—Upon the advantage that would accrue to the students, and to post-graduate study and research, I have already dwelt. Our students, by daily observation, would be enabled to familiarise themselves with cases not crystallised, but in plastic and incipient stages—the very forms that they will meet in general practice.

Opportunity would also be given to the general nursing staff in turn of becoming acquainted with mental nursing—to the advantage of both branches of nursing.

Legal restrictions have sometimes been advanced as reasons against the possibility of use being made of general hospitals for that purpose. Speaking quite unofficially (as I am throughout this address), I would merely say that I believe that the legal difficulties have been exaggerated, and I do not think they would operate to prevent the establishment of psychiatric

clinics. It is true that to utilize the latter to their full extent some amendments in the present law would be needed, and there is good reason to hope that ere very long these will be obtained, and that among other facilities they may render possible co-operation between asylum local authorities and the governing bodies of general hospitals.

CONCLUDING REMARKS.

My task is done. If this address has consisted only of commonplaces, each useless perhaps by itself, my object has been to bring them to a focus, to place somewhat more in the limelight the claims of psychiatry, and to put forward a plea for a wider sympathy with its needs. If peradventure one be found here whose attention has been engaged by any of my remarks, I beg him not to be satisfied with taking for granted what I have said, but to look into the question for himself; I have confidence that his interest, once aroused, will not flag, but will bear fruit. As to the part in the problem I hope some day to see general hospitals play, if not presumptuous, I would venture earnestly to ask the authorities of this hospital to consider the feasibility of adding to their units a psychiatric clinic. Has it not been the steadfast determination of the Middlesex Hospital to provide the fullest opportunities for teaching, study, and research in every branch of medical science, not only as respects the preliminary and intermediate subjects, but also on its clinical side? If I have dared to suggest that a gap exists in the latter, it is one that, as far as I am aware, is common to all other general hospitals in this country, and if the Middlesex Hospital resolved to lead the way in filling it in, or bridging it over, its action would surely be no departure from its considered policy, but rather the fulfilment of its highest and best traditions.

(¹) *I.e.*, October, 1914.

Remarks on the Interpretation of Dreams, according to Sigmund Freud and others. By F. STJOHN BULLEN.

FOR a long time attempts have been made to discover definite relations between external and internal stimuli occurring during sleep and coincident dreams, as also between dreams

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and the more or less momentous happenings preceding them during waking hours. Such attempts as have been made to prove obvious connections have mostly failed, and for reasons which for the first time are set forth by Freud. At the same time, he has demonstrated the subtle evasions and tortuous routes which pertain to the operations of stimuli on the way to dream-consciousness, whether they be sensory or purely physical, as well as the indefinite period of time over which reminiscences, which are concerned in the evolution of the dream, may extend.

It is impossible to summarise the extensive researches of Freud except by dealing *seriatim* with the various segments into which his work is divided, and that is the course here adopted. At the same time I have not merely limited myself to the discussion of Freud's theories, but have surveyed other literature, and treated the whole subject in a critical attitude.

Firstly, as to the *source* of those stimuli which modify dreams during slumber.

Of the influence of objective (*i.e.*, presentative) stimuli there is no doubt, but as to the immediate correspondence of the dream with them there is uncertainty, for the reaction of the mind is rarely determined by correct associations. Illusions are often brought about by faulty linkings, or by the awakening of several memory-pictures, the selected survival of any of which is not predicable.

Of the subjective sensory stimuli, the retinal are said to provide the main source of dream-pictures, with which, indeed, they may be identical.

Of one thing we may be sure, that the actual material of the dream is *central*: distinct "presentative dream" is out of the question. Presentations can seldom do more than arouse consciousness. If, however, they do enter it, apperception and will being quiescent during sleep, they are accepted with greater or less absence of criticism.

In the waking state, the relations between mind and body are ill-defined, but, during sleep, the conscious interdependence is more marked, and stimuli, which under the former condition lie latent, become recognisable in the latter, when the transmission of external impressions is no longer accomplished. Thus occur the harassing dreams often associated with heart and lung disease, dyspepsia, the erotic dreams of sexual excitement, etc.

These organically determined sensations arrange themselves in two groups, general and specific, and to the latter belong muscular, pneumatic, gastric, and sexual impressions.

In regard to all the stimuli whose sources have been mentioned, the pertinent fact to be remembered is that they are not directly placed before the mind's consideration, but are allied to "dream-presentations" according to certain rules, and it is these presentations, and not the sources on which they depend, that are dealt with in dream-consciousness. In other words, these organic stimuli are not delivered in *literal* form, but changed within the brain, in apparently unrelated symbols, for the purpose of objective demonstration. Thus, disturbance of the heart's action produces a feeling of effort or obstructed movement.

At the root of this process, as we shall see, is mental dissociation and reconstruction on the basis of imperfect association-working.

Much of the material forming the dream will have originated amongst the experiences of the few preceding days, although these can be modified in their presentation by external and internal stimuli, and by psychic episodes. At any rate, events occurring during these days antecedent to the dream not only have a preferential influence, but, at least in some details, are invariably represented. Thus the happenings of these few days need scrutiny in the process of elucidation of the dream-meaning. But the source of the dream, although preferably sought for amongst recent events, may extend so far back as the reminiscences of childhood. In this case, one may surmise that such early images which have been obscured by the mass of later acquisition, and left beyond the range of the average circulatory and nervous tidal waves, can only have been allowed to revive by the removal of this incubus, owing to the influence of some toxic or structural lesion or change. When the reminiscences do appear, it seems that the emotional state which originally accompanied them may have undergone perversion.

The source of the dream, however, whether recent or not, is admittedly difficult to trace, for, in the main, the dream-subjects are trivial, and to be only regarded as a current in reverse of the impressions which have been received during the previous few days; a stream, too, largely deprived of

matters which have really conscious consideration. So that it might well be accepted that it is only impressions of a trivial kind that obtain prominence in consciousness, although not the fulness pertaining to more definite thought.

According to Freud, indeed, as will be seen later, these trivialities actually do survive, because the want of importance enables them to escape repression ; their purpose being, nevertheless, of moment, in so much as they are said to serve as carriers in disguised form of those unconscious ideas which have been rebuffed in endeavouring to penetrate consciousness.

Apart from this, a prominent cause for the insignificant character of most dreams must be sought for in the feebleness of the association work ; the penetration of the necessary tracts requires effort beyond that available in the dream-state. If, too, normal paths of association are closed, any direct conjunction of ideas is prevented, and thoughts which should be mutually interdependent occur separately or are presented in forced and unnatural contiguity ; they are thus fragmentary and fleeting because ill-organised.

This in itself argues a limitation of the psychic sphere in dreaming, but there are, however, two theories concerning the amount of the involvement.

First, that the full activity of the mind exists, although placed under unusual conditions : here is found an analogue to paranoia. Secondly, that there is a diminished psychic activity ; the invasion of mind is patchy, or there are, again, isolated areas of inaction such as may be supposed to exist in dementia or amentia. In the second group, coherence in thinking or imagery increases towards awakening, as the dissociated groups of nerve-cells become restored to synergic activity. Against the completeness of this theory Freud presents the evidence of the meaningful and intelligible forms of dreams which sometimes occur, and in which all signs of a lowered or subdivided activity are wanting.

Dreams are readily forgotten, and this depends on the conditions just mentioned, also on the want of attempts made to recall them, and again on the fact that the actions in dreams are largely portrayed by means of visual symbols. Hence the links of association between sound and vision, ideo-motor and so forth, are only narrowly and loosely formed, or are based on casual similarities.

The really momentous contents of the dream, as already inferred, are in the main prohibited from reaching the conscious level by the repression of what is termed the "endopsychic censor"; hence for the manifestation of these contents the relative resistance of the censor and the relative energy of the unconscious forces are the important factors.

In children the dream appears often and evidently as the fulfilment of a wish, and in adults its appearance is equally significant to Freud. Although it is recognisable occasionally in the adult in such direct forms as the imagined gratification of a desire to quench thirst, to micturate, to obtain sexual congress, to accomplish aerial flight, to have restored the catamenia in the case of an unwelcome pregnancy, yet the wish-fulfilment is more often concealed or disguised because of some repellant attitude exercised towards it by the censor.

Impressions, too evasive or indeterminate for analysis and control, which exist in the subconscious life, on passing the barrier between this and consciousness are brought into the sphere of active feeling, and in accordance with normal procedures are analysed, welcomed, or rebuffed, distorted, disguised, or modified into some acceptable form. The expression of a wish may thus appear under disagreeable circumstances on the surface quite at variance with its nature. But the manifest dream-image in such an instance is to be regarded as a distortion of the real thought, and not as representing directly the wish. The painful character only indicates the attitude or emotional atmosphere aroused at the admission of the dream to consciousness.

Most of Freud's illustrative cases are too long for quotation, but one instance admits of compression, and seems to exemplify his theory that a wish-fulfilment may appear under a sombre disguise. It is as follows :

A woman who, much to her grief, sustained the loss of a favourite nephew, had a dream in which she saw another nephew dead and lying in his coffin, with certain ceremonial adjuncts similar to those of the real death. Her emotion is one of profound distress. This vision, at first sight, it appears unfeasible to regard as a wish-fulfilment. But Freud gives the explanation that the woman had a secret affection for a certain professor (from whom, by the interference of the dead child's mother, she had been alienated) and had been in the habit of

indulging her *penchant* by taking every opportunity of being in his presence. After the death of the child the professor was in her company, standing at the side of the coffin. The feeling that the death of the second child would allow a repetition of a longed-for meeting instigated this dream. Thus the selection of a sorrowful episode was an attempt to disguise the real wish-seeking expression.

In the majority of cases dreams having origin in wishes do assume a painful character as a result of repression. The obverse, however, occurs in so far that states of thought and feeling may be engendered during sleep of a complexion quite contrary to that of waking hours. Hence the dream may prove a relaxation, and a suggestion of escape from day-depression.

In either case, Freud would have it that the result is a modification produced by the antagonistic attitude of the psychic forces represented in the formulated wish and the censorial repression.

The constitution of the dream comprises two states or functions. First, the provision of the latent dream-content or dream-thoughts, and secondly, the transformation of these into the manifest dream-content, which is another form of expression, so to speak, a form of picture writing, needing to be read in the same way as a rebus and not as a direct sign. At the best, however, it may be said, an indifferent process of symbolism.

The relationship of these two states is of the highest importance. The latent content or dream-thoughts which lie at the back of the dream imagery are the correct material of the dream, its essential meaning, drawn from the ideas which have not come into consciousness. Constituting the pith of the dream as these do, they have, however, of necessity, no direct or invariable relation to the dream imagery, into which they are ultimately translated by an activity special to, and characteristic of, dream life: a process qualitatively different to the methods employed in waking thought.

This process, which Freud terms the dream-work, involves many complicated readjustments, which arise out of the repressive attitude of the censor (or endo-psychic factor).

Amongst these is *displacement*, or the substitution of indifferent for important material, a method by which an experience of

moment may be regularly represented by a trivial impression, and one which may be regarded as intentionally devised to secure for the serious matter the evasion of the censor, and the atmosphere of pain. Freud maintains that there is a fundamental tendency in the mind to suppress every experience that is associated with painful emotion.

Elements apparently of essential nature in the dream thus do not necessarily become at once recognised as being of importance. Indeed, it is rather frequency of occurrence (or, on the other hand, assemblage of similarities) that determine appearance in the dream, or what is termed "manifold determination." This process of dream displacement, therefore, involves the reduction in value of elements of high psychic intensity, and the appreciation through manifold determination of elements of seemingly low value. A revaluation, so to speak, of psychic material is brought about. Freud remarks that transvaluation is shared by different dreams in extremely varying degrees. There are dreams which take place without any displacement; the more obscure and intricate the dream, the greater is the part to be ascribed to the impetus of displacement in its formation.

Displacement also includes (1) the substitution of one idea for another, the second being in some way connected with the first, and (2) the concrete expression of an abstract word by which it can be visually depicted and more easily represented. Words used conventionally in a faded, abstract way may have their old vivid meaning restored to them, *e.g.*, "one has got oneself in a hole" or "one will have to take flight."

Visual images thus aroused by transformation are naturally influenced by presentability in the scene, that is, suitability for pictorial representation; the seriality of these scenes exercises a more potent control than the progress of coherent thought.

Yet another process is involved with the preceding ones of displacement and determination, *viz.*, condensation. This compression is great, as compared with the range and profusion of the dream thoughts. It may be accomplished by an ellipsis or jump from point to point, but in the main there does not occur any mere uniform condensation, but a process of selection or exclusion following on an elaboration of the dream thoughts, according to the relative strength or weakness of certain elements. Thus, elements resembling each other mutually

reinforce, as features common to a family are emphasised in a Galton composite photograph. A process of collecting and compounding is most important in dreaming : similarity, agreement, community, are expressed as a unity either by identification of several things as one, or as a composite unit.

As already has been indicated, the essential complex of the dream thought need not, therefore, be represented at all in the dream ; the manifest content, or imagery, may be grouped round other and less important material. Associations also may be modified for the purpose of furthering some serial procession of images. Thus varied values are treated on an equality ; composite or collective mergings of persons or things are formed ; words are treated as actualities rather than as symbols, and undergo distortions, substitutions, and ambiguous interpretations. All these vagaries in penetrating the manifest dream content are transformed into scenic parade. Small wonder that, as Freud admits, an overwhelming number of our dreams are incoherent, complicated, and meaningless !

The last process is that of regression of thought, whose hinder limit during waking hours is the plane of "memory-pictures," but which, during dreaming, still further dives down to perception level, and evokes the images from which the memories originated. This constitutes the so-called hallucinatory dream. A striking analogy is supplied in this regression to the "raw material of thought" to hallucinatory delirium of the insane ; in both a loss of relativity in thought is involved.

The regressive progress in the child is a fundamental one, by which response to, and gratification of, some physical or psychic need is made. The revival of the memory-picture of that perception, which at the first was co-related to the satisfaction of the need, proving inadequate, fresh mental processes are started which underlie the wish.

This explains the more ready fulfilment of desire in childhood's dreams. The child only assimilates gradually his peripheral sensations into himself, and consequently tends to objectivate his feelings, and regard them as outside himself. Like all primitive beings, he tends to confer his vitality on inanimate objects. It is characteristic of his mental processes, according to Havelock Ellis, that daring fusions and abnormal logical tendencies should occur ; that prone to reverie he should be liable to confuse dreams and reality. In the dreams of his

elders the same things happen, and thus, says Freud, "the dream of the adult is but the abandoned psychic life of the child." The dramatisation in the dream of the child is, however, more vivid in kind, whilst it is less impeded by memories and experiences.

In the interpretation of the dream, all these processes of displacement and distortion, condensation, compromise, scenic illustration of abstract thought, together with the realisation of the wish-influence, and the important part played by child reminiscences, and immature as well as mature sexual instincts, have to be borne in mind.

There are numerous dreams analysed by Freud which serve as guides in penetrating the mazes of the dream-life, and these illustrate the existence of a plasticity of psychic material which at one time may need a literal, at another a symbolical interpretation to be given to the dream content. It seems likely, too, that the patient may create his own type of symbolism.

Freud, as is well known, assigns a sexual basis to most of the phenomena observed, and that he does so frequently is not astonishing, seeing that he asserts that dreamers may use anything, however ambiguous, as a sex-symbol; moreover, that there is no series of associations which cannot be adapted to the representation of sexual facts. A most extensive list of symbols connoting the sexual organs and functions is afforded, including umbrellas, nail-files, cravats, aeroplanes, tables and boxes, which would have overwhelmed even Rabelais.

There are several dream experiences, well known to most, which Freud considers of typically sexual origin. Amongst these we find the sense of nakedness accompanied by shame and inhibited movement, and it is notable that in these visions the imaginary spectators are both unknown and indifferent, being probably dream-substitutions in a negative attitude of some person for whom sexual exhibition was intended. All fear, anxiety, and impeded movement (negation of volition or conflict of will) are considered as of sexual origin: that is, as a "libido" which has been thwarted, turned away from its object, and transformed into fear. This "libido" is not to be translated invariably, however, as a crude sexual desire.

Dreams of dental irritation and extraction, although more uncommon, are believed by Freud to denote cravings for self-

abuse. This interpretation illustrates the latitude which Freud allows himself in the process of analysis. To be brief, dental irritation is a transference from under to upper regions. In the symbolism of unconscious thought, genitalia are replaced by face, various features about the two regions are made interchangeable by suggestion. Teeth alone have no counterpart in the nether regions, hence from this disagreement are projected under force of sexual repression. Again, the sound-resemblance of the word "vogeln" to a coarse expression, is supposed to confer a sexual significance on the appearance of birds or birds' heads in a dream; even on the sensation of *flying*, which is familiar to us all. Another and more plausible explanation of this curious feeling, however, is that of the reproduction of the infantile impressions of being dandled, or swung to and fro. The sense of assurance that the dreamer has been in some locality before is stated to have reference always to his previous occupancy of his mother's womb.

This is, indeed, a disinterment and detachment of the faintly realised and assimilated sensations of embryonic life, and Freud's theory seems to us an unwarrantable attempt to bring a mere condition of paramnesia under the group of sexual reminiscences. The conditions favourable to pseudo-reminiscence are in fact present, *viz.*, lowered mental tone and lessened attention, defective synthesis, faulty adaptation to the presentations of the moment. Just the state, in short, where reminiscences are equalised in value to sensations on the one hand, or to images on the other. There is no reason to question the identity of this state in waking and dreaming.

And the sensation of flying has been, we think, much more correctly ascribed to respiratory stimulation, conjoined to diminished consciousness of tactile pressure due to anæsthesia of skin. The feeling of floating is known to us during ether administration. Ellis remarks on its occurrence in the dying, and as due here to the concentration of life in the brain and central organs, and to numbness of the periphery. We are here reminded of the anæsthetic states associated by Stoddart with visceral hyperæsthesias.

In these and many other instances there is no doubt that Freud exercises his agility in interpretation to a perilous degree, but his genuine profundity of analytical power must not be invalidated by such examples of strong bias in sexual matters.

Dreams of beloved and defunct relatives, said not to be uncommon, are to be interpreted in two ways, according to whether the dreamer is unconcerned, in which case the dream does but supply an emotional atmosphere to a latent and unrealised dream-thought, or the dreamer is affected. In this latter case it implies that at some time in the dreamer's life the death of the person dreamt about has been wished.

Here Freud lays stress on the forgotten once-time egotism of the child, and its selfish or hostile impulses ; also on its sexual differentiation. This period of its life he regards as an unmoral one, often uncovered in later years by hysteria, or revealed in its failure to receive correction with the oncoming of puberty, a condition rather to be viewed as an arrest of development than as a degeneracy.

We see, then, how essentially Freud's views of the dream differ from those usually entertained. Instead of returning consciousness being indicated by an irregular shifting imagery, without purpose or logical connection, and mainly influenced by the tone of *cœnæsthesis*, the dream being in brief but the preface to awakening, we have Freud's theory of the dream as a protector of sleep by its processes of avoidance of pain and pursuit of rest, and again as having a definite origin in desire, reinforced by an organic impetus derived from unconscious memories. Thus with him the dream is the outcome of a desire checked in its full expression, and diverted to other forms of display ; it is always purposive and significant. The first process in the dream is the conglomeration of isolated presentations, all of which, however, have a certain basis, forming a kind of Galtonian photograph. Then arrives the process of displacement of subjects and transference of values, by which superficialities of the dream serve to cloak, whilst symbolising, the real thoughts and feelings of the dream. Then there is the dramatisation of the whole collection of elements into a succinct episode.

As is well known, Freud ascribes all psycho-neurotic symptoms to the conflict between the wish-fulfilments of the unconscious and the censor. The activity of the latter lessens during the night, when dreams are allowed to pass it under the rule of compromise-formation. On the contrary, the gaps in serial thought during deliria are said to be due to its over-action and ruthless repression, whilst its pathological enfeeble-

ment, together with forceful excitation of the unconscious, allows ideas to be translated into uncontrolled action.

It may well be that the mechanism adopted by Freud to explain the wish-fulfilment and other complexes during dreams is over-elaborated, and bears too much the impress of an artificial system created to tally with the phenomena rather than a genuine solution. We have to beware, in these intricacies of explanation (in the words of Lugaro), "of the excessive prejudice of certain psychologists, who would find, at all costs, a link of causal connection between mental phenomena which succeed each other in an incoherent and disorderly manner."

Freud, then, assigns the various evasions and distortions of the wish-fulfilment to the attitude of censorial repressions. Whilst other conditions may influence the vagaries and incongruities of the dream, he confers on the censor the burdensome rôle of bringing about a most complex and intricate play of substitution processes which hitherto had been regarded as mere inconsequent results of untrammelled ideation, due to removal of control during sleep.

Now, the constitution of this so-called censor may be viewed in two aspects. In one it represents a fundamental mechanism for causing the avoidance of pain, by diversion or transformation of the impression. In another and later stage it produces a restraint of the dream-effects, *i.e.*, it deliberately inhibits, sets aside, or walls up those tendencies which it is proper to check.

In the first case it bears an evident relation to emotion ; in the second to morality and convention ; so that, broadly viewed, it is developed on a series of attitudes antagonistic to instinctive tendencies. (We have, of course, to realise that Freud's censorial repression is not limited by any rigorous conventional attitudes in the ordinary acceptance of the term, but merely expresses a special antagonism to certain ideas and desires presented to it ; these need not be noxious in nature.)

The result of the negative position of the censor towards the emotions that try to pass it would be to create a state of tension and restriction, but that such state should exist under the conditions of dissociation prevailing during slumber is unlikely : the suggestion of emotional stress or of repression at this time is disfavoured. The whole question of the prominence of emotional states during dreams is a vexed one

With Freud, the action of the censor in dispersing emotional agitations by transformation of the dream-material, where this involves it, is the main feature of the dream-work, for, by this means, the wish-fulfilment is got through in some, albeit in disguised, form. Emotion, however, when it does appear, often bears indifferent or erratic relation to the nature of the dream-thought. This has been explained as the result of the stability of the emotion, whilst the dream presentation has undergone displacement; or, again, that the affect has been entirely separated from its proper idea.

With Havelock Ellis, however, emotion is the fundamental source of our dream-life, and the chief function of dreaming to supply adequate theories to account for the amplified emotional impulses which are borne in upon sleeping consciousness. He also finds in emotion the basis of the symbolism which plays so important a part in dreams, inasmuch as with a similar state of feeling there occurs an association of spiritual and physical states. Ellis believes emotion and morality inseparably connected, even in dreams, but one may demur that, however active the part played by emotion in the dream, the influences of morality and convention are seldom noticeable, nor in the existent state of mental dissociation likely to be so. This latter, and the levelling of mental processes to a common value, result in more primitive conditions under which inhibition is but imperfectly exercised. Hence the most extraordinary situations arising often occasion neither surprise, shame, nor grief in the dreamer.

Thus it does not seem likely that during sleep there is any obvious censorial repression at work in its conventional aspect; but the more primitive and emotional tendency to the suppression of mere pain may yet be to some extent in force.

If emotions play no great part in dreams, and censorial action dictated by morality and convention is unlikely to be momentous, there can be no weighty obstruction to any ideas repressed during waking life escaping and rising into consciousness during sleep. There may thus be no need to ascribe to the censor the whole responsibility of the extraordinary imagery of the dream.

Freud, however, only concedes that during sleep a relatively less active state of his censor exists, and he explains all the vagaries of the dream-pictures and thoughts by the aforesaid

elaborate machinery of divergencies, transformations, and so forth, destined to avoid this repression. If, therefore, a wish ever arrives at fulfilment in the dream, it must be in a disguised shape, a form which demands interpretation. Freud's contention is that in whatever aspect it appears, it succeeds in arriving, and is to be recognised by certain methods.

One may pause to inquire whether (with the few exceptions in which the supposed realisation of the desire is after all but faintly accepted by the dreamer) the wish-fulfilment could ever be attained in dreams, quite apart from any censorial action. In the first place, the conditions during sleep are against the necessary tension of apperception and selection of ideas required to carry this through; all the characters of dreaming rather suggest the wide range of ideas, the narrowing of focal consciousness, and the impartial presentation of all phases of waking life, whether trivial or grave. We should conjecture, too, that the emotion and motor determination involved in the attainment of the wish would result in awakening when the climax was reached. But it is conceivable and likely, seeing how near we can approach to consciousness before actually recovering from an anæsthetic, that the dreamer may arrive at the stage nearly preceding wish-realisation and yet remain asleep. Is there, however, any other explanation for the apparent negating, falsifying, and evasive action attributed to the censor during sleep? Are these processes due to another condition habitually concerned in the mechanical routine of thought?

We have to consider that during sleep, mental processes, apart from the dissociated action of the various brain-organs, take place on a lower plane, and tend to be presented in conditions short of full and perfect working. In other words, we incline to the belief that many of the suggested prohibitions of the censor, as instanced in the well-known "contraries of dreams," are due to the imperfectly balanced action of contrasted ideas. There is no need here to dilate upon the origin or importance of these. The whole evolution of race and individual must have depended largely on the experience acquired from negative as of positive attitudes. Even in these civilised ages, when the experiences handed down by our forebears have conveyed a valuable stock-in-trade of negative attitudes which can be taken for granted, the education of the individual implies a constant alternate presentment of mutually

exclusive states, by which an approximate balance in ideas is preserved, and the too rapid, perhaps haphazard, course of one line of thought is prevented. Anyone familiar with systems of artificial mnemonics knows the use that is made of "opposite ideas," and will also have observed that of all varieties of association-processes this is the readiest, simplest, and most automatic. Indeed it may be said to be almost the rule that any train of thought is followed by one contradictory in attitude.

Thus, an idea is only comprehended by placing it in contrast with its opposite, *i.e.*, it has only a relative value. It is said that in primitive speech a word expressive of quality merely conveyed the relation between qualities rather than the qualities themselves.

Normally, the halting balance between contrasting ideas is determined by an active attitude based on the more considerable backing from desire, experience, and so forth, and the ultimate decision involves an increasing avalanche of these factors, with accompanying increase of tension. But the predeterminant state will always be one of negation. It may be that in the dream of wish-fulfilment this stage is not passed. When the wish is on the verge of its fulfilment, the inevitable contradictory phase arises and remains dominant, because the further tension which would be engendered in attaining the wish would cause awakening. Before this could happen the lack of restriction in the association processes would probably allow the impulses to wander and the crisis to pass.

In these opposing states, negative and positive, the experience and temperament of the individual must weigh, each state being reinforced according to the support given by memories and associations. The disposition of the neurotic person is marked by a defensive attitude, timidity, or hesitation, as against a normal assertiveness, confidence, and determination, and hence in dreams, as in waking, there will be a tendency to negative polar attitudes.

Freud, himself, recognises the association of reverse attitudes of fear with desires, and Näcke has described contrast dreams, in which the character and actions of the dreamer are represented as opposed to those of his real self. Such dreams do not exemplify concealed desires, but merely personal peculiarities and potentialities.

Moreover, it is not necessary to assume that these contrasting

ideas are to be considered as negative phases, the exact opposite of the presented image or thought. They are liable to exhibit the lot of the generally shifting and ill-controlled imagery suggested by all the realisable inconsequences of unrestricted association.

We must recall that in sleep, as in conditions where volition is impaired and mental reduction prevails, a state of negation or antagonism is favoured, or occurs involuntarily and without necessary dependence on delusion. Attempts at serial processes in the dream are mostly defeated by these distortions and incongruities arising out of the use of the very processes necessary to carry on consecutive ideas; it is the short phases of trivial representations in dreams that seem clear and realistic, because of their want of intricate connections. From this cause, too, the recent trivial incidents are so common in dreams; they are by chance reproduced in active presentation by a flushing wave of foreconsciousness, just as a detached fragment of floating wreckage becomes a more prominent sport of the sea than the coherent mass from which it has been separated.

The influence of suggestion on the sleeping brain is also a question for consideration. From the objective side, suggestion can be but limited; from intrinsic causes, it may be limited only by the ability to furnish a steady relay of associated ideas and experiences. But, from the vacillating character of the dream ideas, the constant and primitive-like alternation of presented and contrasting ideas, as well as the impossibility of any lasting tension involved in restricted dream processes without a leakage through inapposite associations, the influence of suggestion can be but transitory.

Freud, in this recent work on dreaming, does not consider at any length the relations of dreaming to insanity, merely indicating certain parallels. Such relation is, of course, of peculiar interest to us, and we may well bring this review of dreams to a close by a short summary of this branch of the subject.

Several pronouncements on the similarities or parallelisms of dreams and insanity are familiar to us, *e.g.*, "Insanity is an enhancement of periodically recurring normal dream-states," "Dreaming is a short insanity, insanity a long dream," "Find out all about dreams and you will know all about insanity." Let us discuss these so-called parallels.

In both dreams and insanity, symbolism is the prominent feature. It is favoured in the former by closure of the ordinary channels of restricting sensations ; in the latter, in many cases, by intense mental preoccupation, in which an abstract state is fostered, and hallucinations, rather than normal perception, occupy the attention.

Psychic dissociation, sometimes a cause of this, sometimes an effect, is another essential factor in dreams of adults, and in many forms of insanity, especially of degenerative kind. By this disintegration segments of the psychic being are detached and recombined into groups which appear external and foreign to the main mass of the ego ; hence these dissociations are always regarded as extraneous to the self, and acquire a dramatic aspect. Subjective processes, however, always retain their specific character in dreaming, so that consideration of, and comments upon, the passing imagery is recognised in thought as distinct from the dramatic representations which are demarcated and regarded as real and objective. The splitting-up of the personality of the dream goes to the extent of allowing a detached portion of itself to be contemplated as an actor in the drama, or appreciated in some disguise which it may assume. But the division of personality is never so marked as in certain forms of insanity where the foreign portion assumes a dominating influence.

In both dreaming and insanity, in certain of its phases, there is a reversion to primitive ways of thought, and to symbolism ; there is loss of distinction between waking and dreaming thought ; there is ready translation of thought into imagery, and a general rise in the perceptive element, and fall in the conscious, or in true mental relationships. There is analogy, too, between the regression of thought in dreaming, *i.e.*, the return of the psychic current towards the mechanism of actual perception, and the hallucinations of insanity. Hence it is argued by Tanzi that the imagery of dreams is formed in sensorial centres, and thus is hallucinatory in character. " There is," he says, " no ground for believing that dreams are dependent on a mechanism different from that which determines the occurrence of hallucinations in poisonings and in mental diseases." In this reversion, as H. Ellis indicates, we are on common ground in the case of the child, the savage, and the madman.

Common to both dreaming and insanity is the fundamental

element of *cœnæsthesis*. Organic sensations not only determine the tone of the psychosis, but are transformed into an imagery showing no direct relation to themselves. In both, spontaneous attention alone prevails, based on emotional states ; in both, apperception is in abeyance, and presentations are accepted without criticism.

In both, *paramnesiæ* are met with, not only in the sense of recognition of a past impression, but in the reduction in value of externally aroused perceptions, so that in states of psychic enfeeblement memories, percepts, and ideas have equal value. Thus, the experiences of others are transferred to ourselves, and, as a result of false additions and subtractions of events, wrong estimates of time, confounding of old and recent happenings, and so forth, the medley of the dream and the semi-delirious state of mental reductions bear resemblance.

In sleep and insanity alike ideas are presented opposite in sentiment to those harboured in the waking state, and often obverse to some latent wish. On the contrary, however, the dream in sanity and madness, and delusion in the latter, may express the wish in an undisguised manner.

Just as in madness, sudden phases of lucidity, or even brilliant imagination, may occur, so, during dreams, the fortuitous assemblage of ideas, freed from the bondage of external impressions, may result in a clear, novel, and valuable product. The liberty, too, of sensory images, and the influence of emotion, may certainly convey an augury of some approaching physical malady, whether of body or mind, to be set forth. Hence the dream may likely serve as a prodrome to insanity, and by its agitating influence on the emotions hasten its onset. The same chance concurrence of ideas in dreams may produce the crystallisation of a delusion.

One has hardly ever failed to find in the work of that greatest of all psychiatrists, Griesinger, illuminating remarks on any subjects, however modern in development, connected with insanity. It is, therefore, interesting to revive his remarks on dreams made over sixty years ago. He writes: "The dream, like insanity, receives tone from the governing disposition, which may equally well be determined by the mental occurrences of waking life as by changes of the organic states during sleep. The ruling sentiments of pleasure and pain call for their corresponding images, in which objects, without form in themselves,

become sensuous clothed shapes, and what enters from without, through the senses, meets in the dreamer, as in the insane person, a centre preoccupied and filled with the given disposition, and becomes perverted to, and construed in the sense of, the ruling sentiments and ideas. Whilst, again, the same twofoldness of the personality, and the same emotions ensue when groups of ideas and sentiments of unaccustomed hostile intent stand opposed to the ego (repressed ideas). The dream, like insanity, is occupied in transferring to the external world, in dramatic form, the subjective imagery." Griesinger comments on the greater frequency of agreeable dreams in mental or bodily exhaustion than in states of health, and he adds: "The ideas suppressed in waking life come forth strongly in dreams. To the distressed individual come dreams of happiness and fortune, or reunion with some lost loved one. So, also, in mental disease, from the dark background of morbid painful emotion, *by sinking into a still deeper state of dreaming*, the repressed contending ideas and sentiments (*i.e.*, bright visions of future fortune and happiness) stand out, and the former mental misery changes to the mirth of the maniac." Thus the shock of deprivation of some desire or possession leaves behind the opposite idea or sentiment.

The advantage of Freud's theories concerning dream states is that they are constructed on the same plan as those dealing with the waking life. His system, instead of merely furnishing a series of observations on apparently disconnected, inapposite, and shifting dream phantasies, is one, definite, and claiming a reaction linked to cause in a definite manner. Freud's subtlety of explanation for the enigmatic variations of the dream is remarkable, but it is impossible not to feel that his scheme is often artificial, and its tendency to force a solution of mental problems which is the result of mixture rather than of combination. It would seem as if he had claimed too much for the dream-significance as a whole, whilst elucidating some of its casual values. One cannot help speculating, too, as to how far the supposed solutions arrived at by psycho-analysis, both in the case of dreams and waking, are the result of suggestion by the examiner. In the hazy state left by the dream, where reminiscences and subsequent ideas are not well separable, the errors which arise under paramnesia are probable; the patient, adjured to allow his imagination free play, may involuntarily

absorb suggestion, and, as in the case of the paranoiac, adopt what Griesinger has termed the "attempt at explanation" with complete satisfaction. It is true that Freud has recognised this danger, but it does not appear to us that any sure safeguard has been devised. Freud has naturally the same bias as regards the sexual origin of many events in the dream as he has shown elsewhere, and as for the most part he only deals with his "Oedipus," and other well-known complexes, in special relation to the dream, there is no need to comment in this place. This prominent leaning on the part of Freud has, in this country, impeded the acceptance of his views and methods, and epithets of pruriency and puritanism are mutually exchanged. It is, however, too often lost sight of that Freud is dealing with a people whose general materialism and attitude towards sexual life is largely different to our own, and, moreover, with a special group of such people. From failure to realise this, his views on the neuroses of childhood, for instance, are misunderstood. The extraordinary protrusion of sex-matters into the life of the Teuton, not only in adult but in child-life, is shown clearly in Austin Harrison's book, *England and Germany*. Here is noted the large number of suicides amongst young children, due, it is inferred, to precocious education, and premature awakening of love. Nearly every German boy and girl have some "grande passion"; the boy thinks of feminine attributes and attractions as does the English youth of ten years his senior. The majority of child suicides, writes Harrison, are traceable to "thwarted love." Here, therefore, is an atmosphere which is certainly alien to us, and, hence, not reckoned with in our estimate of the statements made by the Austro-German school of neurologists.

Probably an almost exclusive attributing of sexual motives in the constitution of the neuroses is a passing cult of fashion, whose advocates, like vultures, scent carrion from afar. The more sceptical minds in this country may, on the contrary, prefer to assume the passive rôle of the ostrich. The truth may well be sought in the mean course. The attitude towards Freud least just, and to ourselves most unprofitable, is that of unqualified disparagement or indifference: his is one of the greatest and most ingenious psychological minds of our time; it is only necessary to allow for a certain exuberance of imagination, fertility of explanation, and arbitrariness in inference.

Drug Addiction in Relation to Mental Disorder.⁽¹⁾ By
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WE are at present meeting the most momentous, as well as the most grave, crisis in our national history. No period in the past has ever equalled the present to us as a race and an Empire in the importance of its issues and destinies. Our existence as a nation is at stake, and we are opposing with all our skill, might and main, the fight of might against right. We are engaged in a "ruthless, relentless, and remorseless" war, waged with the cold, calculated scheming of a great business enterprise, and before it is over the best of the lower and the middle classes, the cultured, and the representatives of the professional classes, the scientific and literary workers—those who are the backbone of this country—will probably have to pass through the ordeal of a great bereavement, much stress, and endure an anxious if not an embarrassing poverty.

It may be well, therefore, that we should pause to inspect our armour, even at this critical juncture, and attempt to discover, if possible, any sources of weakness which may be subtly assailing us socially. Of late years, to a greater degree, many of the masses, as well as the classes, have sought ease, and avoided stress ; the theatre, the music hall, the ballet, and the cinema, have been the diversions of the many, just as the light novel, and the scrappy newspaper articles have been the popular literary food ; in both cases a pabulum, it must be admitted, suitably adapted for the morbidly neurotic temperament. It is possible, however, and it is predicted by some, that the material suffering entailed by a terrific struggle, such as we are witnessing, and are sharing, on the continent of Europe at this moment, may quicken men's pulses, and stimulate their spiritual and intellectual life into higher ideas and action. Be this as it may, it is a fact that the present age, so far as progress is concerned, is one which has been pre-eminently characterised by medical and sanitary advance, yet, notwithstanding the dis-

coveries of science, and with our increased medical knowledge, there is more faith placed in quack remedies, and more money spent on secret and useless nostrums, than ever before, and this in spite of the findings of a special Committee of Inquiry instituted by the British Medical Association, and a Select Committee on Patent and Proprietary Medicines appointed by the Government, which have demonstrated the uselessness of many of these vaunted recipes. Such an appreciation on the part of an uninformed public, and such a belief in the efficacy of empirical remedies to control symptoms and to cure ills, show that we are in too great a hurry to decide for ourselves, being only too ready to rely upon the clever but unscrupulous advertisements of the vendors of these so-called remedies. It also accounts, in a measure, for the addiction to drugs which may become a habit, and which then proves to be a serious menace to the health of the best worker. The temporary relief from pain, and the transient comfort obtained by the soothing effects of certain sedatives (too often believed to be harmless in themselves), is an excuse for the resort to drugs. Another excuse for this addiction is said to be the quest for pleasure which has characterised the present day, the age of neurasthenia, nervous breakdown, and "brain fag." Pleasure has been sought everywhere, but contentment is nowhere found! A further reason may be found in the present constitution of human society. Thanks to a liberal system of education, women are enjoying a larger measure of freedom to-day than they ever did before. It is conceded to them that they have a right to order their lives according to their own standard rather than according to early Victorian notions, or those dictated to them by men. This has had the effect of making women more independent and free. They have become more the comrades and the companions of men, they join in their sports and pastimes, and they are more the equals of men in competition. They thus share men's frailties, and not seldom become a prey to their temptations and weaknesses. For this reason, it is believed that women drink more now than formerly, and the eager workers among them not infrequently resort to drugs for "help." It is also stated that women yield more readily to the love of luxury, excitement, and pleasure than men do, thus becoming more self-indulgent, and, in consequence, flying to sedatives in order to cope more readily with the artificial pleasures of social life.

An American lady could only brace her nerves sufficiently to undertake her social duties by taking freely of certain advertised tabloids. Dr. (now Sir) Seymour J. Sharkey wrote an article in the *Nineteenth Century* many years ago in which he stated that fashionable women resorted to morphia to such an extent that they carried subcutaneous syringes which had been jewelled to disguise their use.

The destructive effects of drugs upon the mind and body are a high price to pay for soothing self-gratification, for their sedative effect saps the best aims of the daily life as surely as it extinguishes the high ideals and conceptions of the spiritual life. The question—why do men and women take drugs? may be answered precisely in the same way as the question—why do men and women drink? Firstly, because drugs tend to soothe the mind, and to make men and women oblivious to pain, discomfort, and wretchedness, and to give the false idea of a stimulating mental activity; but the happiness is short, the mental energy transient, and the relief is brief. Stimulation is followed by an opposite reaction, the refinement of the woman is destroyed and the virility of the man is extinguished, the material framework and the mental endowment are equally shattered, duties are neglected, obligations are repudiated, ambitions are unattained, and it is soon found that self-indulgence has been gratified at too high a cost to the mental and physical reserve. The “things that matter in life,” to quote a recent expression, are no longer seen in their true perspective, and the man or woman soon falls from the high standard aimed at, which may have been at one time the goal within view.

I have based this paper upon an experience of over forty cases of the drug habit, and these are records of the asylum, viz., of those who have practically become mental wrecks, whose careers, bright and promising in many instances, have been destroyed by a habit as insidious in its origin as it is destructive in its effects. There are physicians present to-day who can rightly claim to be leaders in their special branches, and their experience will corroborate my own. It is known that, for every case that comes into the asylum there are probably scores outside the asylum who pander to the habit, and whose mental and moral state is on the border-line of insanity; others are insane, but their friends do all they possibly can to keep them

from the additional stigma of certification and incarceration. The evidence of physicians, as well as of general practitioners, is clear as to the disastrous effects following upon the indiscriminate use of strong drugs, although probably only the repentant sinner visits the consulting-room, and seeks for help to overcome the thralldom. The medical man also naturally entertains a professional delicacy as to publicity from the private case-book; moreover, the habit is a secret one, which makes it still more difficult to deal with the matter publicly. The daily press in addition bears witness to the ease with which dangerous drugs can be procured by the public, and to the sad loss of working material consequent upon the drug habit in the community. Headings such as the following are too numerous to quote: "A Girl's Downfall through Drugs." A lady of good family, was found guilty at the London Sessions to-day of theft, and her downfall was due to taking drugs and drink. "The Drug Habit." He was finally brought up at Westminster, charged with assault, etc., and was bound over; stated he would in future give up the drug "habit." The coroners' courts add many more to their number. A medical coroner of experience and distinction writes to me: "I have had the deaths of three doctors, one from opium taking, and one from morphia injections; these two often used to come to inquests half insensible; a third died from addiction to tincture of nux vomica, which he used to take every morning."

That the drug habit is a wide-spread and serious evil is further evidenced by the following statistics, kindly furnished me by the Registrar-General, for the year 1912, the last year for which the figures are available. The deaths from poisons and poisonous vapours are given as 1,141 cases, of which 438 were from negligence or accident, and 696 from suicide. He states that among the accidental deaths registered in England and Wales, there were:

48 from opium, morphia, and laudanum.	2 from narcotic (kind not stated).
12 from veronal.	3 from trional.
5 „ chlorodyne.	1 „ paraldehyde.
2 „ cocaine.	1 „ acetanilide (antē- febrin).
5 „ sulphonal.	
4 „ chloral,	

And among the deaths from suicide were :

52 from opium, laudanum, 1 from cocaine.
and morphia. 1 „ sulphonal.
4 from veronal.

In addition to these, there were fourteen deaths from the drug habit, *viz.* :

3 from opium, 1 from chlorodyne, 1 from a drug not
5 „ morphia, 1 „ paraldehyde, specified.
1 „ laudanum, 2 „ nicotine, and

It is seen, both from this list, and from my own cases among the private patients and the more educated at Claybury, that the victims are from among the most energetic and useful section of society, and it is mainly among the educated and cultured that these cases are seen. It is advanced in regard to these that there is a physical difference between the brain pattern of the poorer and less educated as a class, when compared with that of the cultured brain-worker of the middle classes. The complexity of the convolutional pattern in the brains of the latter is in marked contrast to the simplicity and the smaller weight of the brain and convolutions in the former, and it is known that these physical differences carry with them psychological and physiological concomitants, which imply a higher sensitiveness, and a greater vulnerability in the physical temperament and mental constitution of the better classes. Drugs, as we learn both from reading and from experience, exercise a peculiar fascination over the minds of brain-workers. The quieting effect of opium, for instance, over worry and anxiety, the feeling of *bien faisance*, and the peculiar, dreamy condition induced by it, when the imagination is fired and quickened, and when ideas and images float before the mind without effort, during which sensuous feelings, and the fabled calm of the lotus-eater, are in marked contrast to the strong, energetic activity of healthy and vigorous production.

The power to draw ideas from the subconscious into the field of consciousness by the help of drugs is too great a temptation to many a brain-worker ; black coffee and green tea are familiar and common examples ; and this stimulation appeals with particular force to the artistic temperament. Many are the doctors, nurses, journalists, authors, barristers, literary men and women, and even clergy, who have yielded to the insidious

temptation of resorting to drugs, and whose mental breakdown has resulted from the habit. As is well known to every physician practising in the department of mental diseases, the brain-worker lives in a state of complex thought and emotion, and the rapid and varied adjustment to a complicated environment is often the measure of his success. The quick and brilliant response to an immediate demand is the measure and fulfilment of successful brain-work, but often when the eager hand reaches to grasp the prize, it is plucked away by some competitor better equipped for the purpose, or more highly strung; and then it is that the strain of effort calls for the stimulant, the "brain tonic," the nerve restorer, or the sedative. The worker finds the drug has "toned" him up, or it has afforded temporary relief from anxiety. He is either too busy or too indifferent to obtain medical advice as to the real cause of his trouble; the drug has braced him up, and he resorts to it again and again on the most flimsy pretext, until the day comes when the drug habit, with all its sinister consequences, has obtained the mastery over him. The following cases, quoted from my own experience, support what I have to say:

(1) Æt. 33, single, a medical man; admitted excited, noisy, incoherent, and violent; it took five men to take him to his ward. In his certificate it stated he had visual illusions, and had glimpses of the "happy land." He had slept badly and taken morphia to relieve headache, and his illness had been coming on for thirteen months. He had been in Bethlem Hospital, and Dr. Stoddart kindly supplied me with the information that, whilst in the reception room awaiting admission, he swallowed a packet of morphia, and not knowing how much was contained in the packet his stomach was washed out. Thirty grains were found upon him, and seventeen more packets of powder, each labelled "two drachms." Whilst at Bethlem the morphia was suddenly discontinued, but alternative sedatives, such as chloral, sulphonal, and hyoscine were administered. Three months after admission into Claybury he had a seizure, after which he rapidly became demented and exceedingly feeble. Six weeks afterwards he had another seizure, and died. Upon *post-mortem* examination syphilitic gummata were revealed in the brain. No history.

(2) Æt. 35, single, a school-teacher; worried because she failed to pass an examination. Took drugs, under medical advice, to a large extent. Had two attacks of insanity, but recovered quickly when she left off taking drugs—paraldehyde and sulphonal. A bright, fairly well-educated, but neurotic woman, who developed sex delusions and suicidal tendencies. No heredity.

(3) Æt. 39, married, a journalist; admitted with acute depression and suicidal tendencies. He was restless and fidgety, sallow, and wretched. He edited a paper at twenty-five, began to take morphia

three years before admission, and drank to excess. The habit commenced after his mother's death, which also occurred through morphia, taken originally upon medical advice, and the same doctor communicated the habit to him. His conduct became erratic, unreliable, and he neglected his business, and left his wife and home. He had voluntarily entered a "retreat" on three occasions. He was in the habit of taking 20 gr. of morphia per day hypodermically, and after admission two hypodermic needles were extracted from underneath the skin of the right arm and left leg. He craved so intensely for morphia that he stated he was ready to have his hand cut off, or his arm thrust into a furnace, if only he could receive one subcutaneous injection of morphia. He recovered mentally and was discharged, but he was readmitted in a dirty, neglected, and miserable state two and a half years afterwards. In four months he was again discharged recovered, and after he left he wrote a deeply grateful letter for the kindness and considerate attention he had received, but he added that it was unnecessary for him to enlarge upon the futility of his efforts to break the habit, as the man to perform such a deed was yet to be born. Father insane (drink), mother's side phthisis.

(4) *Æt.* 30, single, a doctor, who yielded to the morphia habit, which destroyed his promising career. He was ultimately certified as insane, and was received into an asylum. No history.

(5) *Æt.* 32, single, a servant, had an attack of hysteria with depression at the age of twenty-five, and was under treatment in Paris for one and a half years. She was admitted to Claybury in 1912 with hysterical symptoms, and suicidal tendencies. She was strange and suspicious, deficient in self-control, and inclined to laugh and weep without cause. She boasted she had been in the habit of taking "headache powders," described them as "sedative" powders she obtained from the chemist, paying sixpence for them; she took them in order to do her work properly, and to cure periodical depression. Thinks they brought her to the asylum, where she has been for two years. Grandmother's sister was at Brentwood.

(6) *Æt.* 44, single, an authoress, states she nursed her mother through a serious illness, and that she took laudanum in ounce doses to aid her literary work, and this for long-continued periods. She was admitted in a wretchedly depressed mental and physical state, with hallucinations of sight and hearing, but she improved greatly under treatment, and she was a humorous, quick-witted, excitable, and lively person of the artistic temperament. She gained a stone in weight, and was discharged recovered in three months. A statement was made by a doctor that she had been a drug-taker for long periods. Paternal relative in asylum, paternal uncle drank, paternal grandmother burnt to death in a fit.

(7) *Æt.* 44, single, a milliner, described as an habitual sedative-taker and a drinker. She mostly took chloroform and sedatives for neuralgia. She states she obtained her sedatives from the chemist, and has taken drugs regularly for insomnia. She was admitted in a depressed state, having nearly destroyed herself with chloroform. She is an educated and bright woman, but suffers from loss of memory. Has been in Claybury nine months, and is still under treatment. Father drank,

maternal grandfather phthisis, maternal grandmother cancer ; paternal side not answered.

(8) *Æt.* 39, married, a lithographic artist, of marked ability, did unaccustomed night-work, and suffered much stress, and except under the influence of bromides he obtained no sleep. Admitted with marked depression and sleeplessness, he was excited, emotional, and restless, and looked very ill. He had suffered with insomnia for years, and habitually took bromides. Recovered in three months, and gained over a stone in weight. No heredity.

(9) *Æt.* 39, single, an insurance clerk, stated to have suffered from severe insomnia for three years, and to have taken a considerable amount of sulphonal, also lately drank two ounces of whisky nightly with the object of getting sleep, although he was until then a life-abstainer. He was admitted in a shaky physical state, and a feeling of being gradually run down ; mentally he was depressed, restless, walking up and down the room, and fearing he was "going mad," but was without delusions or hallucinations. His memory for recent events seemed to be failing, and he was unable to carry on the small details necessary for his occupation. Was discharged recovered under three months. Sister at the Manor Asylum, mother attempted suicide twice, maternal aunt died at Claybury.

(10) *Æt.* 34, married, a clerk in the Bank of England, with a pleasing, intelligent manner, but with marked symptoms of depression, and delusions of a self-acusing character. Took laudanum, and once nearly ended his life thereby. He complained of having had no sleep for months before admission, and had been in the habit of secretly taking drugs to induce sleep. The suppression of this factor and others in his private life caused him to worry and brood as to his wife's confidence in him, and attachment towards him, and he was certified as insane, but recovered after four months' treatment. Patient's father drowned himself from a ship, mother had sunstroke and insanity, and finally drowned herself at Brighton.

(11) *Æt.* 25, single, a civil engineering student at King's College, took trional for twelve months before admission. He was suffering from marked depression and listlessness, and a want of interest in his surroundings and himself, he had been sleepless and worried, and, being of a highly sensitive disposition, became despondent about his work and prospects. Previously in Camberwell House. No heredity.

(12) *Æt.* 52, married, a cabinet maker, described as a temperate man, but had suffered from influenza, followed by insomnia. Took veronal, and developed delusions of suspicions against his wife. His memory was good, and he reacted readily to questions, but he became depressed, and before admission had been treated as an out-patient for neurasthenia at St. Bartholomew's Hospital. His suspicions against his wife increased, and he bought veronal without a prescription, and once almost died from an overdose, to hide his supposed shame. He was admitted to Claybury in 1914, and was discharged recovered in three months. No history.

(13) *Æt.* 64, married, a medical practitioner, who had practised in Somerset and Essex ; took opium three or four years before admission to relieve attacks of ague, and this was followed by drinking brandy.

He was described as energetic and industrious until his indulgence brought a general weakening of mental power, and with this some neuritis, and consequent visual and cutaneous hallucinations. Admitted to Claybury as a pauper patient in 1914. Father died of paralysis, maternal uncle drink.

(14) *Æt.* 60, widow, described as a well-educated, quick person, who had obtained her livelihood as a needlewoman. She was very nervous and easily disturbed, suffered from periodic headaches, and was very susceptible to outward stimuli. She was depressed and suicidal on admission in 1911, stated she was unable to sleep, and had recourse to sedatives, having been an habitual bromide-taker. She nearly ended her life with bromide of potassium and chloroform before admission, and had written to the coroner in view of her own inquest. She recovered in nine months. Father drank; husband also died through alcohol.

(15) *Æt.* 26, single, a cook; admitted suffering from extreme melancholia, with delusions of persecution. She had taken large quantities of laudanum, which she took "to drown her sorrow and disgrace," and because she was "unfortunate." She lost all moral control, and had several illegitimate children. No history.

(16) *Æt.* 56, widow of independent means, admitted with delusions that she was the victim of a conspiracy to defraud her of property, and that there was a deeply-laid plot against her. Had taken chlorodyne habitually and to excess for three or four years; she would take three or four bottles a week of Freeman's (4s. 6d. size), and her mental symptoms had been coming on since. She became self-neglectful of her person, and of her domestic duties; used to remain awake at night, but slept so soundly by day that she could only be awakened with difficulty. She recovered under treatment in eleven months. Father very intemperate.

(17) *Æt.* 25, married, a board-school teacher, and an educated young woman; took chloral, bromides, sal volatile, and alcohol. She developed hallucinations of sight and hearing, and feared she might hurt herself or others. She became separated from her husband—a musician—neglected her child and home, and sank lower and lower until she lost all moral control and sense of right and wrong. She used to boast that she had a trap-door in the floor of her bedroom full of chlorodyne bottles. She was discharged recovered, but subsequently relapsed again, becoming a confirmed drunkard, and would drink or take anything she could get. Mother insane. Father and brother drink.

(18) *Æt.* 55, single, a pianoforte finisher, a life abstainer from alcohol. Was admitted suffering from delusions that he had been drugged by a relative, and that he was the victim of the "black art mystery." He had suffered from sleeplessness, and for years had been the victim of the chlorodyne habit. He had hallucinations of taste, vision, and hearing, and imagined those he looked for had some harm through him, so he wore glasses to prevent the effect. Admitted in 1911, and discharged recovered after five months' treatment. Sister died in Claybury.

(19) *Æt.* 20, a traveller, was a bright and quick boy at school. He was of a reserved and unsociable disposition, disinclined for any games,

became addicted to the morphia habit for "a long time" as a youth, and this craving extended to any soothing drug he could procure, although he was never addicted to drink. He went out to Canada, but failed there, and returned home again to indulge in morphia tabloids, which he himself purchased. His father attributes his failure to the drug habit, and he is now incurably insane. Maternal grandfather and an aunt drank, as also a paternal uncle. Maternal grandfather died from phthisis. Cousin in Bexley Asylum.

(20) *Æt.* 52, married, a chemist's assistant; he had suffered from an attack of insanity in early life. He was admitted in an acutely despondent state, with suicidal tendencies. He had suffered from marked restlessness and loss of sleep, and was stated by his friends to have been subject to the drug habit, and drugs had to be kept away from him. He was self-accusing, depressed, and miserable. Admitted to Claybury in 1904, and discharged recovered after a residence of two and a half years. No heredity.

(21) *Æt.* 38, single, an author; admitted in a profoundly depressed state, with symptoms of marked physical and mental exhaustion. He is a member of a talented and able family, his relatives being distinguished in both business and scholarship. He is the author of several published novels, and was possibly on the way to fame. He states that he worked hard and continuously at high pressure, and that he indulged in nerve tonics to keep it up. He became depressed, fatigued, and sleepless, and was certified to be insane. He is now confirmed in his insanity. Maternal uncle phthisis, mother died of cancer.

(22) *Æt.* 52, married, a captain in the Army Veterinary Corps, a very intelligent man with a University career, whose whole ambition was in his profession. Stated to have had a fall from his horse, and had been subject to fits; he lost his nerve, fretted and worried over domestic matters and trouble through wife's divorce, and was compelled to leave the Service. He took veronal to induce sleep, and was eventually certified to be insane. No heredity.

(23) *Æt.* 43, married, a coachman; admitted in a greatly impaired bodily condition, and he looked ill and dyspeptic. The skin of the abdomen and both arms was much scarred from the effects of the morphia hypodermic syringe; the habit, originally started by his doctor, had been continued for twelve months before admission. He was deluded, and had hallucinations of taste and smell. Discharged recovered in seven months. Sister drank, and a heredity of "fits or paralysis" stated.

(24) *Æt.* 35, married, a steward, Royal Naval Reserve; had travelled about the world a good deal when on the China station; worried greatly over business affairs, backwards and forwards to Paris and places abroad, making purchases for his business as a fancy goods dealer. He was described as of very steady habits, but most anxious to get on, and ambitious for his family. He became depressed, introspective, a prey to ego-centric ideas, and began to take sleeping draughts of all kinds without medical advice; he became reduced in health, developed neurasthenia, and got into a "brooding," low condition, having later to be certified as he became sleepless and suspicious, wandering about the house with a drawn sword, thinking strange people were about who wanted to take

his life. He recovered within two months. Sister and a paternal uncle insane.

(25) *Æt.* 62, widow of a clerk. She took antipon, and Mrs. Seymour's reducing tablets—many pounds' worth, and got into mental ill-health, and became deluded, garrulous, and boastful. She lost all self-control, and got into the hands of the police through stealing some feathers she fancied. She was certified to be insane. She remains under treatment and has now been about three months under care, having somewhat improved in the meantime. Sister committed suicide.

(26) *Æt.* 58, single, an authoress and artist, a peer's niece; she was recommended by her doctor to take paraldehyde for sleeplessness. She became a victim to the drug, and took from one to two ounces every night. She used to hide bottles under her pillow or bed, and ordered it herself from the chemists. She became suspicious, deluded, suicidal, and gradually lost her reason, having to be certified and placed in an asylum, where she died. No history.

(27) *Æt.* 47, married, a nurse; admitted with delusions of sex, of conspiracy, and persecution. She began by taking chlorodyne, and then morphia. Discharged recovered in two months. Was re-admitted three months later, having now yielded to alcoholic intemperance, but again after two months she was discharged recovered. No history.

(28) *Æt.* 30, single, a lady journalist, of American nationality, with a prepossessing manner and striking appearance. She was admitted in a deluded, persecuted state of mind, confused, egotistical, and muttering; she was in poor condition and wretchedly clad, having been found wandering by the police. She stated she had been the victim of morphia, taken for sleeplessness. After about ten months' treatment she was discharged recovered. No history.

(29) *Æt.* 56, married, a nurse; on admission she was self-accusing, believing she had committed a great crime; she was depressed and suicidal, and only wanted to "sleep it away." She had been a nurse in a public asylum, and had obtained her pension; whilst on night-duty she had been allowed sedatives to induce sleep by day. She sighed and begged and craved for morphia, as she had taken it, she said, for many years. After seven months she was discharged recovered, but eight months afterwards she relapsed, was readmitted, and died incurably insane after six years. No history.

(30) *Æt.* 37, married, a medical practitioner; was admitted in 1912 in a depressed, dull, stolid condition, making no verbal response to questions, and resisting and resenting attentions for his care. He was of the artistic and refined temperament, he contracted the morphia habit, and also drank. He suffered from both visual and aural hallucinations, and suspected poisoning; his memory become affected, but he regained this under treatment, but the period of his illness remained a blank to him. He lost his professional reputation and practice, was certified insane and taken to a pauper asylum, but he recovered completely in six months. No history.

(31) *Æt.* 62, married, a clergyman; was admitted in an untidy, self-neglected, and restless state, was uncontrollable and very excited. He was stated to have been in the habit of taking drugs to induce sleep, but no particulars were elicited in the history, but he had been sleepless for

months before admission. He had previously suffered from similar attacks of mental breakdown. He had been a most capable and respected man, but had gradually fallen lower and lower into a state of incurable mental decay, and died in the asylum. Three brothers and three sisters insane, father drank, and maternal side an eccentric family.

(32) *Æt.* 43, married, a lady dentist; admitted in a depressed and confused state, exceedingly nervous, trembling, and with suicidal tendencies. She complained of headache and vague lumbar pains, for which she had taken morphia; she had been advised to try opium cigarettes, which only produced nausea, and aggravated the headaches. She then took morphia in the form of draughts, which relieved the insomnia and pain; the quantity was gradually increased to 4 gr. doses, after which she said she enjoyed "delightful dreams," "compared to which fairyland was the merest prose." She increased the dose to 6 gr., often taking this in champagne, the result being (in her own words, in a letter after convalescence) that she saw things exactly as she wanted to. She was discharged recovered after four months' treatment, but seven years later she was readmitted, and remained under treatment another year. Was again admitted, and died insane. No history.

(33) *Æt.* 43, married, a pianoforte-maker; admitted with aural and visual hallucinations, as well as marked depression and suicidal tendencies. Two months before admission he lost his work owing to a gradual and increasing self-neglect, and thereby lost the means to buy the drug, in consequence of which he "lost heart" and wandered about half-starved. He could not sleep, became very nervous, irritable, and depressed, complained of acute neuralgia. In four weeks he began to improve under treatment, stated he felt a new man, and was discharged recovered in three months. Four years before admission he began to take chlorodyne for toothache; this he found was too expensive, and he bought laudanum, at first in small doses, which he finally increased to four ounces daily. Sister in Colney Hatch in 1891.

(34) *Æt.* 33, single, an estate agent, but his leisure time was given up to literary and artistic pursuits. He was admitted with delusions of suspicion against his own immediate relatives, whom he thought were against him, and he wished to die. His memory for recent events failed, and he could not be relied upon in business; he was stated to have been for three years before admission almost constantly in the habit of using morphia, cocaine, and atropine hypodermically, and his thighs were marked with the scars of hypodermic needles. His muscles were tremulous and he was in a very impaired state of physical nutrition; he used about nine grains a day of morphia with atropine—he stated, to lessen the depressing effects—but he also used about five grains a day of cocaine. He was seriously ill on admission with diarrhoea and sickness, for which he had "digestive" medicines and maltine. He said he felt acutely miserable, despondent and cold, but after the "craving" ceased he felt much better. He was admitted in 1905, was discharged recovered in three months. He relapsed after three years, having used six grains of morphia and cocaine, and has become incurably insane. No history.

(35) *Æt.* 30, a journalist, single; educated, bright, and quick, had

been in New York and Paris, and evidently well acquainted with the London and Paris restaurants. He was the victim of large amounts of cocaine and morphia, and up to eight grains a day. He had been engaged as the French representative of a newspaper, and followed the French Foreign Legion in North Africa. Had quick ideation, and was full of projects and plans. Was admitted in a voluble, boastful, and irresponsible state, saying he had great wealth, and had been ordering things at various shops for which he was unable to pay. He was confused, and impulsively impatient, speaking rapidly and clearly. He was admitted in a state of confusional sub-acute mania, very run down, generally exhausted, and sleeping badly. Had some cutaneous anæsthesia. Was discharged recovered, after six months' treatment, in 1914. Grandfather drank, but no history.

(36) *Æt.* 39, single, a medical practitioner, and a former student of St. Bartholomew's Hospital; well connected, and with every prospect of professional success. Was admitted with numerous scars and pigmented spots from the use of the hypodermic syringe on trunk and limbs. States he became the victim of morphia and cocaine, and that in consequence he suffered from mental breakdown with marked visual hallucinations; he had great difficulty in concentrating his mind on anything said to him, and he was depressed and listless. States he took morphia in order to be "wound up," as he did better work after its use, and that he took about eight grains a day. His moral sense, and ideas of duty and the rights of others, became greatly deteriorated, and he has become incurably insane. Paternal uncle and two cousins insane.

(37) *Æt.* 45, married, a chemist, described as a highly sensitive, well-educated pharmacist; admitted to Claybury, 1910, but had been detained ten years before for one month in another asylum through "drink." Started the morphia habit shortly after his discharge. He was admitted in a depressed, emotional state, being solitary in his habits, and disinclined to be sociable. His memory was good, but he was the subject of conflicting aural hallucinations. He had travelled a great deal abroad, having been engaged as a dispenser at Biarritz, Paris, Nice, Geneva, Jersey, etc. He states he commenced with gum opii, taking two grains, but later took nine grains of morphia a day, having taken it at first to obtain sleep, and later for its specific effects. He recovered in six months, and left for work abroad, but subsequently took morphia again and relapsed. Paternal aunt insane, some collaterals "delicate," and mother died of cancer.

(38) *Æt.* 42, a typist, married, but separated from husband, who was an officer in the Army, and the son of a general. She herself had been educated at the Royal School for Officers' Daughters, at Bath. She was an habitual drug-taker for years. Her mental symptoms were an exaggerated idea of her own importance, coupled with vague suspicions and threats when not able to get her own way. She was emotional, and there were suicidal tendencies. She was an adept at writing begging-letters. No history.

(39) *Æt.* 27, single, an artist; was a bright, clever boy, and head of the school at Shrewsbury in science. He devoted himself to art, at which he worked conscientiously and hard; he went to study in Paris, and

TABLE 1.—*Drugs and Insanity : Details of Cases.*

No. of case	Sex.	Age.	Civil state	Occupation.	Diagnosis.	Suicidal or Epileptic.	Heredity.	Form of drug.	Result.
1	M.	33	S.	Medical man	Recurrent mania	—	None	Morphia	Died.
2	F.	35	S.	School teacher	Recurrent insanity	S.	"	Paraldehyde and sulphonal	Disc. recovered.
3	M.	39	M.	Journalist	Recurrent mania	S. & Ep.	Father, insanity and alcohol	Morphia	"
4	M.	30	S.	Medical man	Melancholia	S.	No history	"	Died.
5	F.	32	S.	Servant	Recurrent insanity	S.	Grandmother's sister was at Bexley	" Headache powders "	Remaining.
6	F.	44	S.	Authoress	Chronic melancholia	S.	Paternal relative insane; do., grandmother, epileptic; do., uncle, drink	Laudanum	Disc. relieved.
7	F.	44	S.	Milliner	Dementia	S.	Maternal grandfather, phthisis; father, drink	Chloroform	Remaining.
8	M.	39	M.	Lithographic artist	Melancholia	—	None	Bromides	Disc. recovered.
9	M.	39	S.	Insurance clerk	"	S.	Aunt died at Claybury; sister at Manor Asylum	Sulphonal	"
10	M.	34	M.	Clerk (Bank of England)	"	S.	Both father and mother drowned themselves	Laudanum	"
11	M.	25	S.	Student (Civil Engineer)	Rec. melancholia	—	None	Trional	Disc. relieved.
12	M.	52	M.	Cabinet-maker	Melancholia	—	No history	Veronal	Disc. recovered.
13	M.	64	M.	Medical practitioner	Dementia	—	Father died, paralysis; maternal uncle, drink	Opium	Remaining.
14	F.	60	W.	Dressmaker	Affective melancholia	S.	Father (and husband) drank	Bromide of potassium and chloroform	Disc. recovered.
15	F.	26	S.	Cook	Rec. melancholia	S.	No history	Laudanum	Transferred.
16	F.	56	W.	Independent means	Mania (persecutory)	S.	Father heavy drinker	Freeman's chlorodyne	Disc. recovered.
17	F.	25	M.	Board sch'l teacher	Alcoholic insanity	S.	Mother insane; father and brother alcoholic	Sal volatile, bromides, and chloral	"
18	M.	55	S.	Pianoforte finisher	Melancholia	S.	Sister in Claybury	Chlorodyne	"

	19	20	S.	Commerc'l traveller	Primary dementia	—	Cousin in Bexley; three relations drank	Morphia	Remaining.
20	M.	52	M.	Chemist's assistant	Acute melancholia	S.	None	Not stated	Disc. recovered.
21	M.	38	S.	Author . . .	Dementia	S.	Mother died, cancer; maternal uncle died, phthisis	"Nerve tonics"	Remaining.
22	M.	52	M.	Captain (R.A.V.C.)	Epileptic dementia	Ep.	None	Veronal	Transferred.
23	M.	43	M.	Coachman . . .	Melancholia	S.	Sister drank; history of "fits or paralysis"	Morphia	Disc. recovered.
24	M.	35	M.	Steward (R.N.R.) .	"	—	Paternal uncle insane; sister in St. Luke's Hospital	"Sleeping draughts of all kinds"	"
25	F.	62	W.	Widow of a clerk .	Sub-acute mania	—	Sister committed suicide	Antipon and "Mrs. Seymour's reducing tablets"	Remaining.
26	F.	58	S.	Authoress . . .	Melancholia	S.	No history	Paraldehyde	Died.
27	F.	47	M.	Nurse . . .	Recurrent mania	—	"	Morphia and chlorodyne	Disc. recovered.
28	F.	30	S.	Journalist . . .	Delusional insanity	—	"	Morphia	Transferred.
29	F.	56	M.	Asylum nurse . .	Melancholia	S.	None	"	Disc. recovered.
30	M.	37	M.	Medical practitioner	"	S.	No history	"Drugs for sleep"	"
31	M.	62	M.	Clergyman . . .	Mania	—	Three brothers and three sisters (five died insane)	"	Died.
32	F.	43	M.	Lady dentist . . .	Recurrent mania	S.	No history	Morphia and opium cigarettes	Disc. recovered.
33	M.	43	M.	Pianoforte maker .	Melancholia	S.	Sister in Colney Hatch	Laudanum and chlorodyne	"
34	M.	33	S.	Estate agent . . .	"	S.	None	Cocaine, atropine, and morphia.	"
35	M.	30	S.	Journalist . . .	Confusional insanity	—	Grandfather alcoholic	Cocaine and morphia	"
36	M.	39	S.	Medical practitioner	Moral insanity	—	Paternal uncle and two cousins insane	"	Remaining.
37	M.	45	M.	Chemist . . .	Rec. melancholia	S.	Paternal aunt insane	Morphia	Disc. recovered.
38	F.	42	M.	Typist . . .	Moral insanity	—	No history	Not stated	"
39	M.	27	S.	Artist . . .	Delusional insanity	—	Mother died, cancer; paternal aunt, phthisis	Ether	Remaining.
40	M.	52	M.	Surgeon (I.M.S.) .	Moral insanity	—	Elder brother, drink	Morphia and cannabis indica	"
41	F.	35	S.	Superintendent of nurses	—	—	—	Paraldehyde, bromides, and chloral	—

exhibited his work in the Salon, and was probably destined to become distinguished. He, however, took to the ether habit, and developed visual hallucinations, and delusion of suspicion as to spies and being hypnotised; he confused the identity of persons about him, became self-neglectful, heedless, and indifferent, and is now a confirmed lunatic. No heredity. Paternal aunt died of phthisis.

(40) *Æt.* 52, married, formerly a surgeon under the Government of India, and a fair artist—some of his work having appeared in scientific drawings. He started the drug habit by taking morphia and cannabis indica two years before admission. His memory became impaired, and his manner irritable and brooding, with passionate outbursts, and he suffered from visual illusions, ending in delusions of persecution. He was found guilty at the Central Criminal Court of forging a cheque—as “guilty, but insane”—and was ordered to be detained during His Majesty’s pleasure. Is now an inmate of a public asylum. Elder brother drank.

(41) *Æt.* 35, single, a responsible official in a large public institution, with every prospect of further promotion. She began to take chloral and bromide draughts, then paraldehyde, and subsequently drink. She lost her sense of self-respect, and, in spite of various warnings, deliberately ruined her own career. She was subsequently tried for an offence at Quarter Sessions, and sentenced to imprisonment, her downfall being distinctly traceable to yielding to the seduction of sedatives, which demoralised her and destroyed her sense of responsibility. No history.

TABLE 2.—*Summary of Heredity.*

No. of Cases.	Insanity.	Alcohol.	Epilepsy.	Paralysis.	Phthisis.	Cancer.	No heredity.	No history.
41	13	10	1	2	4	2	3	10

TABLE 3.

Form of drug taken.	No. of instances.	Form of drug taken.	No. of instances.
Morphia	9	Paraldehyde	1
„ and cocaine	2	Opium	1
„ „ and atropine	1	Veronal	2
„ „ opium cigarettes	1	Trional	1
„ „ cannabis indica	1	Sulphonal	1
„ „ chlorodyne	1	Ether	1
Chlorodyne	1	“Nerve tonics”	1
„ (Freeman’s)	1	“Headache powders”	1
„ and laudanum	1	“Drugs for sleep”	2
Laudanum	3	“Sleeping draughts of all kinds”	1
Chloroform	1	“Antipon” and “Mrs. Seymour’s Reducing Powders”	1
„ and bromide of potassium	1	Not stated	2
Bromides	1		
„ chloral and sal volatile	1	Total	41
„ „ paraldehyde	1		

Of these forty-one cases, all except one became insane and were certified. As regards sex, and occupation, and civil state, twenty-five were males and sixteen females, although it is stated that women are more often the victims of drugs than men. The fact that there is accommodation at Claybury for sixty male private patients and none for females possibly accounts for the figures quoted here. Three were widows, and the rest were evenly divided between married and single. The occupations varied considerably, but they were those, in the main, of the better educated, and indicated the brain rather than the manual worker. Six were medical men, three were nurses, and one was a lady dentist; two were chemists or druggists, two were teachers, three were journalists, three were authors, two were artists, and there were among them representatives of the clergy, army officers of the professional class, students, and those engaged in commercial pursuits.

It is suggested that propinquity to sedatives, a knowledge of their use, and opportunities for indulgence are causes of addiction, and there is no doubt that this is true, for the greater number were doctors and nurses, over one-third of my cases being in daily contact with drugs. It is encouraging to believe from this statement that legislation of a restrictive or prohibitive character might be a preventive, or a bar to self-indulgence, as it is only too true that many of those addicted to the habit will improve, and to a great extent regain their mental balance, when the drug is withdrawn, as of necessity it must be when they are under care in asylums.

The form of the drug taken is much more frequently an opium derivative than any other kind, and morphia heads the list. More than half my cases took morphia, chlorodyne, or laudanum, morphia being the drug in fifteen out of the twenty-one cases of opium or its derivatives. Some took opiates by the mouth, drinking it as laudanum or chlorodyne, and others used the hypodermic syringe as well as drinking the solution of morphia. Cocaine, either alone or with cannabis indica or atropine, was also taken. The new synthetic drugs caused several persons to become victims, such as veronal, trional, and sulphonal; but sedatives, "sleeping draughts," "nerve tonics," and "headache powders" also figured, and one case was distinctly attributable by the patient herself to the reducing bodily effects of "Antipon," and of "Mrs. Seymour's Reducing

Tablets." Chloral, paraldehyde, and the bromides were considered to be the cause of mental breakdown in the case of five persons. "Drugs for sleep" was the generic term used by one, and "sleeping draughts of all kinds," without definite specification, the description in another. Chloroform vapour was used in two cases, and ether in one, in another smoking opium was the method and the sedative. The largest quantity of morphia taken was stated to be 20 gr. per day, afterwards increased to 50 gr. of the acetate. In fact, the limitation of the quantity generally depended upon the pecuniary position of the victim, and the quantity of morphia taken was generally as much as the means would allow. In some of the morphia cases the limbs and the body were literally scarred all over by the hypodermic syringe, the skin of both arms, the abdomen, and thighs being often pigmented through and through by the needle. One case took 4 oz. of laudanum for a daily dose, and another drank bottles of chlorodyne as often as she could afford to buy them.

It is notable that the average age when they were brought into the asylum was forty years for males and forty-three for females, an age when the struggle to maintain the position reached was the most severe, the most trying, and the keenest, when every accession of energy was not only most useful, but of vital importance for actual existence, a period for females which is also the most critical from the standpoint of mental and physical resistance.

It is of interest that there is a family history of insanity, of epilepsy, or of paralysis, or an inheritance of phthisis or cancer in the families of considerably over 70 *per cent.* of the total number of my cases, which certainly shows the neurotic temperament of drug victims, and which allows the question to be put whether drug-takers are not primarily insane, and not that the drug habit itself induces insanity.

Two of the cases suffered from epilepsy, but they had been very able persons. In most of the cases, melancholia, or insanity of the depressed type, was the form of mental disorder, and this was the case in 75 *per cent.* of the total. The reason why these cases are brought into asylums is mainly through attempts at self-destruction, or from the fear of their friends that this may happen, and the frequency of a suicidal tendency, which was observed in 57 *per cent.*, confirms this statement. Four of the cases were of the form described as moral insanity,

and it is difficult, perhaps, to differentiate cause and effect in some of these cases; but I am inclined to the opinion that moral turpitude is one of the chief mental effects of long indulgence in sedative drugs of all kinds; mostly is this the case with the morphia-taker, as it is well known to be with the drunkard. The form moral insanity implies a loss of the finer feelings, a blunting of the conscience, a disregard for truth, and an unreliability which makes it impossible for the victims to enjoy the confidence of employers, or even the regard of their friends and relatives. The moral obliquity, and the bare-faced un-veracity in this class are marked features; but the progress of deterioration is a slow one, culminating, however, in inextricable destruction, the mental state eventually ending in fatuous listlessness, and the physical state in emaciation, decay, and death.

In so far as the prospect of recovery goes, much must depend upon the firmness, the tact, and skill of those in charge of the patient; but if the drug is withheld, and liberal nourishment is insisted upon, the prognosis is on the whole favourable. Out of my forty-one cases, twenty-two recovered; two were improved; three were transferred elsewhere; and four died. Nine continue to be resident and under treatment in the asylum. As may be seen from my cases, not a few have started the drug habit from a misapprehension in regard to medical advice; some, it may be said, whilst undergoing medical treatment, although with more truth it might be stated the sufferer has become a victim through his own effort to undertake his own relief. Indeed, the casual resort to a drug to obtain relief from a trivial ailment is often the starting-point in a downward career of drug-taking, and there is no doubt whatever that the habit, which is almost universal, of taking drugs for trivial disorders is a very serious one and calls for intervention. The progress of pharmacy has made it possible for the general public to treat itself to-day in a way that was impossible in a previous generation, for new drugs and new preparations have been invented which are found to relieve certain symptoms with apparent success, and such trivial symptoms as headache, slight insomnia, restlessness, pains, and neuralgia are often thus relieved without medical advice. But these apparently trivial symptoms may be the serious signs of severe mental or physical overstrain, and the drugs taken often mask the symptoms of

an underlying and undiagnosed disease, the recognition and treatment of which by a doctor might quickly cure ; the disease, however, continues until it is no longer curable, and the symptoms which might have been allayed by attacking the cause remain until there is absolutely no remedy and no cure. Unfortunately, the sedatives, refreshers, cordials, headache powders, and other nostrums tend to produce a habit that is far more distressing than the symptoms that have led to their adoption, and this habit brings in its train infinitely more serious consequences. The transient feeling of stimulation, as has been stated, is followed by exhaustion, the natural forces of the body have been lowered to such an extent that the victim drifts into permanent ill-health, and the toxins within the organism begin to impair the digestive and other functions ; they weaken the heart's action and lower the whole of the bodily and mental functions, so that a cure now becomes almost, if not quite, impossible.

The symptoms of drug-taking necessarily depend upon the kind of drug used, and of these morphia is probably the commonest, either alone or in the form of chlorodyne or some other anodyne patent medicine ; next come cocaine, chloral, and the bromides, then possibly chloroform, veronal, ether, trional, sulphonal, and paraldehyde ; "headache powders," antipyrin, aspirin, and phenacetin also figure, and, curiously enough, so does "Antipon," and "Mrs. Seymour's Reducing Powders." I have had the opportunity recently of demonstrating several of these patients to the Lunacy Commissioners of the Board of Control and to Sir James Crichton Browne, the Lord Chancellor's Visitor. Their symptoms varied from visual and aural hallucinations to delusions of suspicion, persecution, and of grandeur ; the mental reduction was of the nature of a dissolution, the characters last attained were the first to disappear, the appreciation of right and wrong, the fine regard for others, and the feeling of self-respect were diminished, and social degradation was complete ; the will had lost its power and the appeal of the home, of dependents, of the wife, or of children, had ceased to have force, and there was complete indifference to distress ; the sentiment of love, and the emotion of shame, of pride of place and of ambition for position, had ceased to move conduct. The whole mind had become weakened, and in addition to the mental symptoms there was

injured health, bodily weakness, tremors, a failure of muscular control, and a total inability for the exercise of energy and activity. Misery, degradation, and pecuniary damage were the inevitable result, and although most of these cases recovered under treatment, many of them died. The loss of moral control in those who did recover was such that once the restraint and the supervision provided by compulsory detention in the asylum ceased, after the patient was discharged, the case frequently relapsed.

It is interesting to discuss the relation of the drug-habit to insanity. Is the drug-taking habit—for instance, the indulgence in morphia—to be looked upon as an affliction beyond the power of the will to modify or to control; is it a disease to be sympathised with, and treated as one in regard to which the patient is powerless to act? Or, on the other hand, is it a pleasure-giving vice, to be treated by punitive methods? Dr. C. A. Mercier⁽²⁾ looks upon all acts which are committed by persons who err against their own interests and against themselves as dependent upon some incapacity in the wrong-doer, which he describes as a failure in that person of the capacity to forego an immediate satisfaction for the sake of some future good. Such a person, he states, is unable to limit his own freedom of action for the benefit of the community to which he belongs; and, Dr. Mercier further adds, it is an incapacity of control, a lack of inhibition, a want of self-restraint, an inability to restrict undue freedom of action, and in so far as the acts tend to disorganise the body politic, or to bring about the dissolution of society, such indulgences may be insane vices, or crimes against society. It is now a crime against society to be drunk in a public place, but previous to the Licensing Act of 1902 this was not so.

The exact line that demarcates vice from insanity is hard to fix, for the difference between the two is merely a question of degree, and this degree is somewhat arbitrary. The person who takes drugs with the view of obtaining immediate, although transient, relief at the cost of future mental or physical health is probably thoroughly vicious, but he is not thereby insane. But the person who indulges in the drug-habit to the detriment of himself, and of those dependent upon him, whose affairs are being neglected, whose health is being ruined, and to whom every appeal to mend his ways is futile; whose family, through his indulgence, is suffering from the deprivation of those neces-

saries to which they are entitled, such a person is certainly, in my opinion, insane. The test of insanity, in this instance, as Dr. Mercier points out, is the gravity or the magnitude of the difference between the immediate advantages to be gained, and the future benefits which are thus being forfeited. The question arises, therefore, are those persons insane who indulge in drug-taking to the degree described above?

Before this question is answered, let us consider if some classification of drug-takers is possible. It is generally agreed that there are grades and classes of these. Firstly, there is the person who prescribes for himself, who is in the habit of taking drugs or sedatives only in small and occasional doses—the casual drug-taker, who is certainly not insane. Secondly, there is the person who has periodic bouts of drinking or drug-taking; he takes bottles of spirits, chlorodyne, paraldehyde, bromides, or opium, or quantities of morphia or other drugs; he yields to a definite physical craving, and indulges in debauch after debauch, but in the interval between the outbreaks—which tend to become shorter and shorter—he is competent and able. Then, thirdly, and recruited from either of the previous classes, are those who gradually yield to the effects of drink or drugs until their physical and mental health is ruined, and they find themselves in the workhouse or the asylum. Such cases are known to every doctor, the habit has grown upon them; it possibly began from a morbid curiosity, or from a prescription of the medical man? The drug-takers of this class may well be described as habitual ones. Before the drug was taken the mind was free from any intellectual defect or disorder, but since then there has been a gradual, yet progressive, deterioration of mind, and, in spite of the fact that the victim knew that he was advancing towards his own destruction, and that his indulgence was leading him to inevitable disaster to himself and those who might be dependent upon him, he pursued his own undoing. When the will-power is insufficient to withstand the habit, when the craving leads to taking larger and larger doses, when it has become a master passion against which the victim is unable to offer his resistance, then conduct can only be described as insane. There is no doubt that the mind has become diseased in these persons, and the sufferer is insane. Sir George Savage pointed this out in an able article in Clifford Allbutt's *System of Medicine*, and he pointed out that many of

this class were of the neurotic type, arising from an unstable stock, and belonging to insane relatives. My own experience supports this view, and I am convinced that the only suitable treatment for such cases is compulsory detention for long periods, if possible, in an asylum, and in many instances the sufferer is only too glad to be thus under care, and to obtain a cure; but he is helpless when directing his own treatment. It is essential for this class that the battle of demorphinisation—as Charcot has termed it—should be fought out where it is impossible to obtain the drug, where discipline is firm, and where the diseased mind can be trained and encouraged into healthy thought and channels under a trained staff.

It has been asked by some whether the drug habit is ever the actual cause of insanity, and it has been suggested whether such a habit should not be described as a contributory rather than the actual causative factor? Apart from the fact that so complicated a condition as insanity is rarely the product of one factor, and that it is now fashionable to refer to correlative, co-ordinate, contributory, or associative factors, the best answer to this is, that when the drug is withdrawn the symptoms abate, and the mind is restored, the patient is discharged from the asylum or home recovered. But with the next relapse into drug-taking the whole train of symptoms reappear with all the former evils in their train. It is only too well known how difficult it is for sufferers from the drug-habit to control their own destiny by abstention. Coleridge went so far as to hire men to prevent his getting opium, and yet he dismissed them for doing their duty!

It is not intended in this paper to detail the treatment of drug-takers. It is proposed only to discuss its relations to insanity, to point out the warning there is to be read from ruined lives, and to suggest some possible preventive action. Should not something be done as a prohibitive or restrictive measure? No amount of therapeutics or legislation will make a bad man good, a drunkard sober, or a morphinomaniac abstemious; but legislation can limit opportunities to obtain drugs, and this was the basis of the International Opium Conference in 1912. It was to secure general agreement among the nations as to the limitation of some of these dangerous drugs. It was felt that it was not enough for a nation to protect its own subjects, but each nation had a duty incumbent upon it to assist the efforts

of others. It is reported that twelve Powers attached their signatures to the first Convention, and at the second Opium Convention, in 1913, the signatories of the Powers had increased to twenty-two. In May of this year, no less than forty signatory Powers agreed that fresh legislation was needed; but the cataclysm in Europe since that date, and the consequent and inevitable reconstruction of the map of Europe, will possibly render all the labours of the last Conference vain and devoid of practical results, at any rate for some time to come. The medical witnesses before the Parliamentary Committee on Proprietary Medicines, of which Sir Henry Norman was chairman, all demanded further restrictions in regard to the sale of patent drugs, in order to prevent the indiscriminate use of those drugs which are likely to endanger the health of the community, and our own country is sadly lacking as to restrictions and safeguards in regard to their sale. I have known cases of insanity due to drink which have recovered in asylums to take a vow upon their discharge that they would never again touch it, remarking apologetically that they found it easy to pass one public-house in the same street, but it was a sheer impossibility to pass eighteen of them! There is no doubt that "the means to do ill deeds makes ill deeds done," as is seen in my cases where doctors, druggists, and nurses become victims. In the absence of special legislation restricting the sale of dangerous drugs it would be wrong to punish the druggist for the lying, deceitful, and often forged statements made by self-indulgent drug-takers, who themselves escape punishment. In this country the sale of a number of drugs, such as acetanilide, antipyrin, phenacetin, male fern, and others, is absolutely unfettered by any control, nor is their sale limited to the chemist, who is trained to dispense medical remedies. The law in this country, as has been pointed out in an able article in the *Lancet* for December 14th, 1912, allows practically untrammelled the sale of many very active therapeutic agents which are a danger to the public, and it allows their sale without either the advice or the knowledge of the doctor. Such freedom opens the door for license and the indiscriminate self-dosing, the victims of which often commence their downward career in ignorance of the disastrous results.

In conclusion, it cannot be too seriously apprehended by, nor too strongly impressed upon, medical men that they have a

great responsibility in the matter of drug addiction. The careless use of the hypodermic syringe, or the unconsidered fascination of sedatives, has led to grievous results. Several of my cases traced their downfall to the use of sedatives upon medical advice. It should be more difficult for the rank and file to obtain access to drugs and special stimulants, and this country is behind others in this respect, and this matter is certainly deserving of attention by the Council of this Society. I would go further, if permitted, and state that no medical man should ever use the hypodermic syringe for any patient suffering from neuralgia, hysteria, or sciatica, and no medical man should lightly place in the hands of patients the means of indulgence in any of the drugs mentioned in the list appended without very serious consideration and reflection.

Inferences.

The conclusions to be drawn from my experience justify the following statements, *viz.* :

(1) Drugs, and the habit of drug-taking, are a cause of insanity and are a public danger.

(2) The symptoms are a serious injury to health, and a deterioration of all the elements of the mind, but mainly of the moral faculties.

(3) The victims are mostly among the cultured, the artistic, and the best brain-workers of the community.

(4) Such a destruction of the ablest and best minds is preventible.

(5) Restriction of the sale of dangerous drugs is urgently needed in the public interest.

(6) The attention of the Privy Council should be called to this pressing need.

(¹) Read before the Society for the Study of Inebriety, at 11, Chandos Street, W., on October 13th, 1914—(²) Article, "Vice, Crime, and Insanity," Clifford Allbutt's *System of Medicine*.

DISCUSSION.

Dr. W. H. B. STODDART stated he was in much sympathy with the movement to limit or check the drug-habit, as he knew how prevalent this was, more especially among those who had an easy access to sedative poisons. He agreed that doctors, nurses, chemists and druggists, and even dentists, were the most common victims, and he felt how difficult it would be, even under the most prohibitive regulations, to prevent this class from the indulgence, but he thought that such restrictions would prevent others from becoming *habitués*. He did not agree that insanity was a common result of indulgence in drugs, although it undoubtedly occurred, or that drug-taking was a common result of insanity, although that also undoubtedly occurred, but he conceived the relationship to be that both drug-taking and

insanity were the result of a search by the unconscious mind for a refuge from stress. He was at the present moment undertaking the effort of rescuing one person, apparently in perfect health, who had been taking cocaine for twenty-three years, and he felt that there must be to victims a relief from stress in the drug-habit, therefore the question arose whether, to the psychopath and the neuropath, such an indulgence, if limited to a therapeutic dose, might not actually stave off an attack of insanity? This is a matter which was worth raising in a discussion such as the present opportunity afforded. His experience of cases of drug-taking was limited to only about two cases in each year, but he quite agreed that there were numerous victims of the drug-habit who never consulted a doctor for it. He considered that Dr. Armstrong-Jones' record of forty cases, the result of a long and large experience, proved that the excessive use of drugs was a danger, and he, himself, was sympathetic towards any measure which would tend to diminish and control such indulgence.

Dr. W. H. WILLCOX said that the sale of poisons in this country was too little under control and far too unrestricted, and he called attention to the difficulty, owing to trade interests and other causes, there was in obtaining the scheduling of dangerous remedies. He, himself, knew of many cases in which suicide had occurred through the too easy way in which dangerous drugs like veronal could be purchased, and he stated that statistics as to suicides were, naturally, unreliable. He considered that the easy access to dangerous drugs was a public evil. An important step was the scheduling of veronal and of all its derivatives, such as the compounds of barbituric acid, medinal, luminal, propanal, and also all poisonous ureides, but he agreed that application should be made to the Privy Council to schedule other poisons such as had been suggested by Dr. Armstrong-Jones, and antifebrin or acetanilide was certainly one which ought not to be sold as at present. He was strongly of the opinion that the supply of dangerous drugs should only be through medical prescriptions, and this should only be possible once. All doctors knew how prescriptions containing dangerous remedies were presented again and again without the doctor's sanction, and not only was this done, but it was used by other persons for whom the drug had never been prescribed. He considered it would be for the public welfare if all hypnotic and narcotic preparations intended for use by the hypodermic syringe should be sold only by a doctor's prescription, and a prescription should only be presented and used once, unless it is fully signed by a qualified medical man at each repetition. There was a large number of very dangerous drugs which were not yet scheduled, and he considered, in spite of the many trade interests, that their use should be limited, and that this Society should initiate measures and use its influence to obtain restrictions and prohibitions in the case of the sale of dangerous drugs.

Dr. J. MILNE BRAMWELL had carefully studied this question of drug-taking, and had a large experience in its treatment. He had spoken and written upon the subject, and he agreed fully with the remarks of Dr. Henslowe Wellington that dangerous drugs should only be used in medical prescriptions, and that these should not be passed about or presented without the doctor's consent. He knew of many cases of light insomnia, of headaches, or of neuralgic pains which had been relieved by sedative remedies, the abuse of which had caused the ruin of many a promising career. He expressed his full concurrence with the object of the paper, and had attended the meeting to record his own strong protest against a too easy access to narcotic drugs. He thought the opinions expressed were those of different standpoints, and were very representative of professional views, and he hoped the meeting would greatly strengthen the hands of those who desired restrictions.

Mrs. SCHARLIEB (the President) quoted her own experience of a gifted, bright, and high spirited lady-medical student, who started upon the morphia habit lightly, but ended by becoming its miserable slave. No appeal to her honour, and no warning as to her future were of any avail. She sank lower and lower in the social scale, until degradation, poverty, and self-abandonment had completed the ruin of an otherwise brilliant future. The paper read by Dr. Armstrong-Jones made a great impression upon her because it recalled to her one who had been one of the most promising of medical students, and her own experience could be supported by those of others, not only in the medical, but in other professions. It

was a sad warning that the drug habit appealed mostly to the brain-worker, and it secured its victims from the most interesting, because the most artistic, and, often, the most gifted and cultured. She could state, as President of the Society, that the matter of restriction would be made the subject of special attention by the Council of the Society for the study of inebriety.

Dr. EDWIN ASH said he was quite in sympathy with the conclusions which Dr. Armstrong-Jones had advanced in his paper. The whole matter resolved itself into how far it would be possible to prevent morbid drug-taking. He divided drug-takers into three classes, *viz.*, those who were only beginning the drug-habit, who took drugs occasionally to relieve pain, or to obtain mental relief from temporary distress or trouble, and who might be described as occasional drug-takers; those, secondly, who had come under the sway and influence of the drug, but whose work was done more or less satisfactorily, with only temporary remissions of failure—and those he classified as the cravers; lastly, there were the actually broken-down drug-habitues who had become mental and physical wrecks. The three groups were not actually separate, but were, broadly, those into which drug-takers could be classified, although recruits from each lighter class tended to join the wrecks, and those who were completely broken-down. He thought the chief hope of stopping the gradual deterioration of the early drug-taker was through the persuasion and the warning of the general practitioner, who might be able to stop a victim in the beginning of the habit. He agreed that the psychasthenic or the neurasthenic were peculiarly susceptible persons, as they felt the sedative effect of drugs to be a temporary help when suffering from restlessness, irritability, neuralgia, and headaches; also that these persons were the most active and the least stable, and they suffered from all the common early disturbances which sedatives relieved for the time being. Dr. Ash considered that a more systematic attention to the early signs of functional nervous disorders would be a controlling factor in the drug-taking habit. He hoped the Society would approach the Privy Council upon the matter, as he felt certain that in regard to restrictive legislation this country was behind other European countries in the direct control of poisons, and certainly so far as facilities for the public to purchase them was concerned.

Dr. R. HENSLOWE WELLINGTON said he spoke as the Deputy-Coroner for Westminster, and as possessing both a medical and a legal training. He knew as a writer—for he had contributed the article, "Law and Medicine," to Lord Halsbury's *Encyclopædia*—the difficulty there was in getting drugs classified in the schedule, for it must be quite possible to differentiate cause and effect, and he agreed that in some cases it was difficult to say whether the drug-habit had caused insanity or the mental disturbance had initiated the habit, but of this he was certain, that dangerous drugs ought to be under far greater restrictions than they were at present in this country. He knew how insidious and progressive the self-using of sedatives was, and how, in the case of alcohol, curiosity was not infrequently the exciting factor in a downward career of drunkenness. He felt very strongly that remedies such as had been the cause of insanity in so many of the cases recorded by Dr. Armstrong-Jones should only be used, and only obtainable in a medical prescription, and that each prescription before it was possible to present it again should receive the signature of the doctor. He, himself, was strongly against powerful remedies being used in prescriptions, and he felt there was insufficient control of such remedies even by doctors. He referred to the opium-habit formerly common in the fen districts of Lincolnshire, but with improved drainage and sanitation the use of opium was unnecessary, as *ague* itself was now uncommon. He thought, with a due understanding of cause and effect, fewer of the strong poisons would need to be used, but he felt, strongly, something should be done by this Society to control the sale of dangerous drugs, and he would like to see a joint committee of this Society and the Medico-legal taking the matter up, and making it the subject of a full inquiry with a view of obtaining a more definite control as to the sale of poisons.

Dr. WYNN WESTCOTT said: I have considered the question as a Coroner, and say that the people in my district of North London are too poor or too hard-worked to buy morphine, sulphonal, etc., but I have had the deaths of three doctors within my experience, one from opium-taking, and one from morphine injections—these used often to come to inquests "half insensible"—and a third from addiction to tincture of nux vomica, of which he used to take a dose every morning.

I regret to say that since the war began the deaths I have investigated as a coroner have doubled in number—women and men—from delirium tremens and alcoholic excess, and I hear from the police at Bethnal Green that women are drinking much more, especially in the mornings. Many money-earning wives and women have more money now than when their soldier husbands were at home, for they used to take part of the women's earnings.

Sir GEORGE H. SAVAGE said: In England one sees chiefly those who have established a morphia or cocaine habit. In some cases doctors have been the cause of the taking of the drug, but I regret to say that, as opportunity leads to faults, so the ease with which doctor and druggist can get the drugs lead to the numbers of members of these callings taking to the habit. As a rule, the drug-taker loses all moral sense. He has no regard for truth or honesty, and will lie even when "on his honour," and to any extent. He is, possibly, curable, but I generally say that any young man or middle-aged one who has taken to morphia, and having been cured once falls again, is never to be trusted. I have seen some cases in which marked mental weakness, the so-called "facility," has followed prolonged drug-taking. Cocaine is, to my mind, in every way a more dangerous drug; it is taken so often with the idea of breaking the morphia habit, or to check the craving. The symptoms often arise so slowly and insidiously that for a long time they are only considered as developments of the normal temperament of a suspicious man. I have seen the slow passage from doubt to suspicion, and then to fully-developed delusions of persecution. Other drugs, such as chloral and the various chemical sedatives, may give rise to various nervous symptoms, but I do not think they are specially noteworthy as causes of insanity. I have known paraldehyde produce active delirious insanity resembling delirium tremens. I trust the Mental Deficiency Act will enable us to control drinkers and drug-takers, and will protect the doctors who are bold enough to make use of the Act.

Friedrich Nietzsche. By HUBERT J. NORMAN, M.B., Ch.B.,
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S.E.⁽¹⁾

Part I.—Parentage and History.

FRIEDRICH WILHELM NIETZSCHE was born at Röcken, in Saxony, in 1844. His father was a Lutheran clergyman, and his grandfather held a high official position in the Lutheran Church. His grandmother Nietzsche "came of a family of pastors," and his mother was the "daughter of a parson" (1). In view of the strongly antagonistic attitude which Nietzsche afterwards adopted towards the Christian scheme of morality, the marked clerical strain in his ancestry is worthy of note. According to his sister their ancestors, paternal and maternal, were very long-lived (2). "Of the four pairs of great-grandparents [one] great-grandfather . . . reached the age of ninety, five great-grandmothers and great-grandfathers died between seventy-five and eighty-six, two only failed to reach old age. The two grandfathers attained their seventieth year, the maternal

grandmother died at eighty-two, and grandmother Nietzsche at seventy-seven." Nietzsche's mother was also long-lived; she was born in 1826, and was married, in 1843, to Pastor Nietzsche, who was then thirty years old. She died in 1897, "after having suffered ill-health for several years" (3). Pastor Nietzsche is described by his daughter as being an "extraordinarily sensitive man . . . any sign of discord, either in the parish or in his own family, was so painful to him that he would withdraw to his study, and refuse to eat or drink, or speak with anybody" (4). This tendency to seek solitude is worthy of note, as it reappeared in a very marked degree in his son, Friedrich. The father was short-sighted—as was Nietzsche—and, in 1848, this resulted in an accident, the consequences of which were disastrous: he tripped over an obstacle which his defective eyesight had prevented him from observing, and he suffered as a result from concussion of the brain. This shock to the nervous system initiated a train of symptoms—chiefly cerebral—which led to his death eleven months later. The fall may have been the cause of the attack; or, as another biographer says, perhaps "only hastened its approach." The same writer informs us that Pastor Nietzsche "might have hoped for a fine career had he not suffered from headaches and nerves" (5). Frau Förster-Nietzsche, however, says (6) that her father had not suffered from headaches prior to the accident. In view of Nietzsche's history, one feels inclined to agree with Halévy, more especially as, where any history of nervous or of mental symptoms of a morbid character are concerned, relatives are usually the last to admit them. Mügge says that Pastor Nietzsche "suffered either from concussion or softening of the brain . . . doubtless this accident *hastened* his death" (7). The youngest of the three children born to Nietzsche's parents, a boy, died just after his second birthday "from teething convulsions" (8). There was apparently nervous instability in the family; and Ireland says that O. Hansson "learned from a family who knew Friedrich Nietzsche from childhood that a disposition to insanity had been inherited for several generations, both on the father's and the mother's side" (9). This statement is not in accord with the details of family history as given by Frau Förster-Nietzsche; at the same time, it is, perhaps, no injustice to her to surmise that she was desirous of minimising the pathological aspect of the family heredity, and

of laying greater stress upon the more favourable characteristics. When Nietzsche's life-history with its morbid mental vicissitudes is considered, however, it would be surprising if the family annals were found to be clear of all traces of nervous instability.

As a child, there is little that is abnormal recorded of him. He was late in learning to speak ; he was two and a half years old, his sister informs us, before he began to talk. As a school-boy, he kept a good deal apart from his companions, and he was even at this time inclined to be solitary and introspective. By the time he was ten years old, he had made considerable advances in regard to his school-work, and he was able "to compose motets and write verses and plays."

In 1857, for the first time, according to his sister, Nietzsche began to show signs of eye-trouble, and he suffered from headaches which may have been due to this. It was noticed also that his pupils were at times unequal (10). About five years later there was some mental change which his sister finds difficult to explain ; the "exemplary boy" became a "somewhat slack scholar," and he began to feel an "extraordinary dissatisfaction with his surroundings." This was associated with physical disorders ; "healthy and strong as he looked, he suffered a good deal during this time from colds, hoarseness, and repeated attacks of eye-trouble and headaches" (11).

In 1864, Nietzsche went to Bonn University ; in the following year, he left there, disgusted with the "coarse, Philistine spirit, reared in this excess of drinking, of rowdyism, and running into debt." He went next to the University of Leipzig, where he remained until 1867. After leaving there he began his military training, but as a result of an accident to his chest he was invalided at the expiration of five months. In 1869, he went to Bâle as Professor of Classical Philology ; in 1870, war having been declared between Germany and France, he set out for the front as an ambulance attendant. He contracted dysentery and diphtheria, whilst attending upon the wounded ; he had to relinquish his duties on the field, and he returned to his work, at Bâle, in the same year. In January, 1871, "he got jaundice, inflammation of the bowels followed, and in addition to this he was terribly tormented by insomnia" (12). It was in this year that his first book, the *Birth of Tragedy*, was published. In the early part of 1872, he was again in good health ; towards the end of that year he com-

plained of headaches and disturbed sleep. In 1873, he became worse; "his short-sightedness considerably increased in the spring, and was accompanied by pains in the eyes and in the head" (13). Later in the year, however, his health improved, and he became cheerful; but in the early part of 1874, he became again "depressed in spirits." He had projected great plans for the future, but he felt that he was unable to carry them out. "If only you knew," he wrote to a friend, "how despondent and how melancholy I feel about myself as a productive creature. . . . For the moment I am really very, very tired of everything—more than tired." He adds—and this is significant—"my health is excellent." Shortly afterwards, according to his sister, "he recovered his pride and good spirits." In the winter of 1875, "another spell of indisposition supervened, and for some months he remained ill and depressed"; then "in a few days . . . his buoyant nature quickly recuperated" (14). Again he became "cheerful and in high spirits, but by the following spring he was depressed, and during this time he "took an extraordinary quantity of medicine." During the period from the middle of August to the end of November, his "health was really excellent. From early in the morning till late in the evening he was radiant and cheerful, and declared himself exceptionally pleased with everything" (15). Just previously to this, Nietzsche had written to a friend that his trouble had been diagnosed as "chronic gastric catarrh, accompanied by great dilatation of the stomach. This dilatation causes vascular engorgements and results in the brain being insufficiently supplied with blood," and he added, "I am to take Carlsbad salts, and am to have leeches applied to the head."

From the end of November, "his good health gradually declined"; he went out of doors seldom, and "even lost all taste for long excursions." He again had recourse to drugs. "After Christmas his steadily declining health broke down altogether. He suffered from terrible headaches and violent nausea." Gradually his health began to improve, and of the early period of 1876 his sister writes: "I was somewhat surprised to see my brother in such good spirits during the spring of this year" (16). She wondered the more as she knew that her brother's offer of marriage had just been refused by a "charming girl." Indeed, it is rather pathetic to observe

throughout Frau Förster-Nietzsche's account of her brother's life how she strives to formulate reasons for his varying mental phases, and the bewilderment in which she—and, it may be added, the doctors also—found themselves at the apparently inexplicable nature of his trouble.

Another observer thus describes his appearance during this period : “ Nothing was more deceiving than the apparent calm of his expression. The fixed glance betrayed the melancholy labour of his thought. It was the glance of a fanatic, of a keen observer, and of a visionary ” (17). It was about this time that he was writing the first part of *Human, All Too Human* : and Halévy's significant comment in regard to it is that in it the author “ reverses every thesis that he has hitherto upheld ” (18). When September, 1878, was reached, “ he was leading a painful and miserable life . . . he was avoided, for his agitated condition gave alarm ” (19). The second part of *Human, All Too Human* appeared in 1879 ; his health grew worse—“ the doctors began to be disquieted by symptoms which they could not ascertain, by an invalid they could not cure. It appeared to them that his eyesight, and perhaps his reason, were threatened ” (20). He shut himself up in his room “ behind closed shutters and drawn curtains.” A friend wrote of him at this time, “ His condition is desperate.” When his sister saw him after a short absence, she “ scarcely recognised the stooping, devastated man, aged in one year by ten years.” He thought that he was lost, that he was going to die ; he made arrangements for his obsequies ; he longed for solitude. He gave up his professorship at Bâle. Toward the end of this year, however, he was able to write : “ It seems to me that I feel gayer, more kindly than ever I was.” But in December he says : “ My condition has again become terrible, my tortures are atrocious.” By the middle of February he was again cheerful, he felt a “ reawakening of his strength.” He continued in this improved state until 1881, in which year *The Dawn of Day* was published : a book which he regarded as the “ exercise of a convalescent who amuses himself with desires and ideas ” (21). He went to lead a retired life in the Engadine, and he is reported to have been “ for some weeks in a condition of rapture and of anguish. . . . He experienced a divine pride . . . His agitation . . . became extreme ” (22). He realised to some extent his own condition,

for he wrote: "Presentiments cross my mind. It seems to me that I am leading a very dangerous life, for my machine is one of those which may *go smash!* The intensity of my sentiments makes me shudder, and though twice already I have had to stay in my room, and for a ridiculous reason; my eyes were inflamed, why? Because while I walked I had cried too much; not sentimental tears, but tears of joy; and I sang and said idiotic things, being full of a new idea which I must proffer to men." Such was the state of mind in which he conceived that strange and dithyrambic philosophical mystagogue, *Zarathustra*. There was, however, another halt, another period of depression, before he could carry on his work. "He lost his exaltation . . . thrice, during these weeks of September and October, he was tempted to suicide" (23). Towards the end of December he passed a crisis, and surmounted it. He became cheerful once more; "his gaiety amazed" his mother and sister, with whom he went to stay. Another book, *The Joyful Wisdom*, was written during this period. Later in the year (1882) we find him depressed again; he became "melancholy and suspicious. One day he imagined that his companions, talking together under their breath, were laughing at him" (24). He broke with his friends; he thought that everyone had betrayed him; he wished once more for solitude, "Perhaps he also wished," says Halévy, "to put to profit that condition of paroxysm, and the lyrical *sursum* whither his despair had carried him" (25). He set about his task of writing *Thus Spake Zarathustra*. It is a strange, fantastic book, and Nietzsche's mental condition at this time is reflected in it. "Every morning, on awakening from a sleep which chloral had rendered sweet, he rediscovered life with frightful bitterness. Conquered by melancholy and rancour, he wrote pages which he had at once to re-read attentively, to correct or erase. He dreaded these bad hours in which anger, seizing him like a vertigo, obscured his best thoughts" (26). There are probably many who read *Zarathustra* who express doubts as to Nietzsche's having spent much of his time in revising and correcting it.

During the year 1882 he wandered from one place to another—Monaco, Rome, Grunewald, Leipzig, Genoa. Early in 1883 he was in Genoa, thinking of retiring to his solitude once more, but "he is feeble, solitude exalts and frightens

him." So he went to Rome. But there he felt "discouraged and ceased to write" (27). Depression once more set in, and he decided to flee from society. There was, however, a remission which apparently lasted but a short time. His sister was amazed at the sudden change; during their journey back to Germany "he improvised epigrams, *bouts-rimés* . . . he laughed like a child, and in fear of troublesome people who would have disturbed his delight, he called and tipped the guard at every station" (28). He returned to the Engadine, to solitude, and to the writing of the second part of his *Zarathustra*. "In it we see no longer the hero whom Friedrich Nietzsche had created so superior to all humanity; it is a man in despair, it is Nietzsche, in short, too weak to express anything beyond his anger and his plaints. . . . He is the prey of a bitter and violent mood, and the virtue which he exalts is naked force undisguised, that savage ardour which moral prescriptions have always wished to attenuate, vary, or overcome" (29). He wrote long letters, which betrayed his agitation, and which gave rise to anxiety in his friends. He left the Engadine, and went to the home of his family in Naumburg. There he found a general atmosphere of domestic quarrels, and he speedily departed for Genoa. From there he wrote to a friend: "Things go very badly. . . . I can live only at the sea-side. Every other climate depresses me, destroys my nerves and eyes, makes me melancholy, puts me into a black humour—that awful tare." He moved on to Nice; towards the end of 1883, he was almost in despair, and the beginning of 1884 found him still dull and capable of no sustained effort. In January, however, the clouds lifted for awhile, and he completed the third part of *Zarathustra*. Halévy describes it as a "disorder of complaints, appeals, and moral fragments which seem to be the *débris* left over from the ruin of his great work" (30). He left Nice and went to Venice in April. The feeling of elation lasted apparently for some months, and he was able to complete the fourth part of *Zarathustra*. At this time he had no doubts as to his great capabilities, and this exalted mental phase is obvious in a letter which he wrote in March of this year: "I do not hesitate to avow that, in my opinion I have, with this *Zarathustra*, brought the German language to perfection. After Luther and Goethe a third step remained to be taken—and consider . . .

were ever strength, subtlety, and beauty of sound so linked in our language? My style is a dance; I trifle with symmetries of all sorts, and I play on these symmetries even in my selection of vowels" (31).

When September came, he was again depressed: "very low in himself, and at the same time exceedingly talkative. This excited speech troubled [the friend who was visiting him]. . . . He spoke in a low and trembling voice, and his face was troubled" (32). This was in Bâle; he left for Zurich. There he became again unduly elated. We are told that the hotel in which he stayed "resounded with his childish laughter."

He went to Mentone still in a cheerful, elated mood; and whilst there he wrote much poetry—"songs, short stanzas, epigrams." His restlessness hastened him off to Nice. The feeling of elation passed, as a letter he wrote to his sister proves: "Here I am ill again; I have recourse to the old means [chloral], and I utterly hate all men, myself included, whom I have known. I sleep well, but on awaking, I experience misanthropy and rancour." Halévy tells us that his behaviour was peculiar; when out walking, for instance, "he would leap and gambol at times, and then suddenly interrupt his capers to write down a few words with a pencil" (33). In April and May, he was in Venice, enjoying a "short-lived happiness"; in June, he returned to the Engadine. Thereafter this truly peripatetic philosopher visited Leipzig, Naumburg, Munich, Tuscany; then he returned to Nice. By the end of the year, he was again passing into a depressed phase. He loathed the *pension* in which he was living: he objected to the rooms, the furniture, the neighbours. "Here is Christmas again," he wrote, "and it is sad to think that I must continue to live, as I have done for seven years, a man proscribed, like a cynical contemner of men"; and, again, that he has had "nights and days that were most melancholy." The next year commenced more auspiciously; during the first three months, "his melancholy appeared to be less acute." He wrote *Beyond Good and Evil*, which was published in the same year. In the spring he went to Venice; depression came upon him once more. He shut himself up and remained solitary. Quite suddenly, he felt that he must set off on his travels once more. He went to Leipzig. An old friend whom he visited there thus described the change which he observed

in him: "All his person was marked with an indescribable strangeness, and it disquieted me. There was about him something that I had never known, of the Nietzsche whom I had known many features were effaced. He seemed to have come from an uninhabited land." In July, he was back in the Engadine; and he felt the first symptoms of a "long crisis of neuralgia and melancholy." His letters at this period are marked by such expressions as that he is a "stranger," or "proscribed man," one "with neither God nor friend." This was his state while he endeavoured to progress with the *Will to Power*, a book in which he was going to attempt to "trans-value all values." But first he must move on once more; he returned to the Genoese coast. He became more cheerful; Halévy suggests that he was now taking drugs to excite him to work: "We know that he was absorbing chloral and an extract of Indian hemp, which, in small doses, produced an inward calm; in large doses, excitement" (34). During the winter, 1886-87, "he lived . . . in a singular condition of relaxation, indecision, and melancholy." He was by this time back again in Nice; then to San Remo and Monte Carlo; and once more to Nice. In the spring-time of 1887, he went to Lake Maggiore; and as the spring passed the depression left him to some extent, and he was able to work more steadily. The improvement lasted but a short time, and he departed to Switzerland for a course of waters, massage, and baths. Thereafter he wrote, in the course of fifteen days, his *Genealogy of Morals*. The following summer was spent in "discomfort and melancholy." In the autumn, he was again in Venice; October in Nice. Towards the end of the year he wrote: "Almost all that I have written should be erased. During these latter years the vehemence of my internal agitations has been terrible." Another year commenced, and found him "again a prey to sadness. He complained of his sensibility, of his irritability." In his own words: "Never has life appeared so difficult to me. I can no longer keep on terms with any sort of reality. . . . There are nights when I am overwhelmed with distress" (35). He became worse: "suffering and irritation deformed his memories." He described his state thus: "Night and day, I am in a state of unbearable tension and oppression . . . my health . . . has remained sufficiently good . . . nothing is sick but the poor soul" (36).

The end was approaching—at least in so far as his intelligence was concerned. The anabolic process had for years been proving insufficient to keep pace with katabolism: the tension in the nervous system had almost reached breaking-point. Yet there was still to be a shower of sparks before the end came; and a singularly vivid display it was. His iconoclasm became even more marked. One idol he attacked with all the fury of diminishing control—Richard Wagner, his erstwhile bosom friend—and him he calls a modern Cagliostro, a low comedian, a decadent. He was still able to realise the change in his condition to a great extent, however, though this realisation did not prevent him from his onslaughts, his vituperations, his “philosophising with a hammer.” In a letter to a friend, written in February, 1888, he said: “I am in a state of chronic irritability which allows me, in my better moments, a sort of revenge, not the finest sort—it takes the form of an excess of hardness.” In April, Nietzsche was in Turin, and experiencing a period of excitement, during which he hurried on his work. “My humour is good, I work from morning to night . . . I digest like a demi-god, I sleep in spite of the nocturnal noises of carriages.” When July came he was in the Engadine—once more depressed. “He lost his sleep. His happy excitement disappeared, or transformed itself into bitter and febrile humours. . . . He walked alone” (37). He finished the *Case of Wagner*, and commenced a new essay, which was completed by September, and was published later under the title of *The Twilight of the Idols*. During September another pamphlet was completed, and the title he gave to this was *The Antichrist*. In it he exalts force—implacable, pitiless, unrelenting—as the only thing of value: “not peace at any price, but war.” It is almost his last amazing paradox: this worn and broken man uttering a pæan to power. The title is suggestive: Nietzsche may, indeed, have considered himself as Antichrist. It is an indictment of Christianity: one of his many fulminations against Christian ethics. Before the year was out he wrote his *Ecce Homo*, and again, perchance it was himself to whom he pointed therein as another Christ, for, when the new year dawned, and the final collapse came, he wrote as signature to one of his letters “The Crucified.”

In the autumn of 1888, “his letters expressed an unheard of happiness . . . He digests well, sleeps marvellously.”

For this unfortunate man, with his nervous system on the verge of utter breakdown, everything is for the best in the best of all possible worlds, or at least in that part of it, Turin, where he was then residing. The exalted mood continued while he wrote his *Ecce Homo*. The titles of the chapters are significant: "Why I write such excellent Books"—"Why I am so wise"—"Why I am so clever"—"Why I am a Fatality."

"On one of the first days of January, 1889, near his lodgings in Turin," writes Mücke, "Nietzsche had an apoplectic fit. For two days he lay stupefied and unconscious on his sofa. Later he was once more able to walk, but he had no idea of the value of money, and paid for trifles with gold; he spoke loudly and constantly, and wrote many odd and quaint letters" (38). One of the letters he wrote about this time included such passages as: "I am Ferdinand de Lesseps, I am Prado, I am Chambige [the two assassins with whom the Paris newspapers were then occupied]; I have been buried twice this autumn." A friend who hastened to him found Nietzsche "ploughing the piano with his elbow, singing and crying his Dionysian glory" (39). The same friend thus further describes his state: "He saw me, and, recognising who I was, rushed to me, and embraced me passionately; then, bursting into a flood of tears, he sank back upon the sofa in convulsions. . . . Nietzsche had hardly sunk back again, groaning and starting convulsively, when they gave him a cordial to swallow. For the moment calmness ensued, and Nietzsche began to talk laughingly of the great reception which was prepared for the evening. Therewith he was back in the sphere of illusions, which he never again left while I was present—quite clear as to my identity and that of others generally, but as to his own involved in utter night." Later, he saw him, "his face like a mask, and with hurried but unsteady gait," being conducted to the train which was to take him to an institution in Bâle. He was removed to another institution in Jena later in the month, and in March, 1890, his condition having improved, his mother took him to her home in Naumburg. The improvement was only a limited one; his mental condition steadily deteriorated. "In 1895 he was suffering from a paralytic affection of the jaw." His memory was practically a blank. "In the summer of 1898 another slight apoplectic fit occurred, and the next year

a more severe one. Nietzsche became weaker and more silent." He died of pneumonia, in August, 1900.

Part II.—An Attempt at Interpretation.

It is the fate of most—if not, indeed, all—writers and teachers to be misunderstood. Hence the plague of exegetical writings, and the obscurity or ambiguity of a writer may almost be judged by the mass of commentary which he has given rise to. The utterances of the Pythoness have not been unparalleled in regard to the difficulty of their interpretation, nor are the sayings of the prophets alone worthy of the application to them of the terms "ambiguous," "obscure," or "unintelligible."

It is not, however, always the fault of the author that his sayings are misinterpreted. Each one of us imparts to his rendering of the meaning of a particular passage something of his own personality, or, as the phrase goes, we "read into" the author something of our own view of the matters with which he deals. That this bias is largely subconscious does not make it any the less real, nor does it detract from the influence it has upon our interpretation. This instinctive feeling is so pronounced in some individuals that they are rendered incapable of giving even the semblance of fairness to their commentaries.

It is the subconscious bias, this instinct, which makes possible the formation of sects, which gives rise to political parties, which fashions men into enthusiastic disciples or into fanatical opponents. It may spring from superficial knowledge—which is but a higher and more dangerous degree of ignorance—or it may be associated with a memory well stored with undigested information. In any case, it is a prime necessity for anyone who wishes to have—or who has without caring whether he has or not—a large and enthusiastic band of followers. It is not characterised by a conflict of motives, therefore the more directly will anyone who is in this particular mental state tend to make for his objective, undeterred by contending impulses.

This state of mind comes into being most readily during periods of national crisis, that is to say, when some predominant emotional stress exerts its influence. This has been exempli-

fied on a large scale in the crusades, in the dancing manias of mediæval times, in the witchcraft delusions, and during hostilities between nations; this feeling rises to a pitch when reason is frequently quite overwhelmed—even to madness in some instances.

That such a bias is, even in these enlightened days, not quite unknown, a brief study of Nietzsche's works, of those of his biographers, or of articles regarding him which appear in the press, will speedily convince us. It is a difficult matter to come to a decision in regard to Nietzsche's teaching even with a great number of the facts before us, and there seems to be only one way in which to reconcile the apparently contradictory attitudes which are found when we study his life and his writings. The contradiction was noted by his sister, who was also his biographer, Frau Förster-Nietzsche, who says: "It is a problem that Friedrich Nietzsche, who denied our present moral values, or at least traced them to sources absolutely unsuspected hitherto—this transvaluer of values—should himself have fulfilled all the loftiest and most subtle demands made by the morality now preached among us. And he did not do this because of any moral imperative, but from a perfectly cheerful inability to act otherwise. I leave it to others to solve this problem" (40). There we have a very plain statement of the contradictions in Nietzsche's mental outlook. It is, after all, a not uncommon problem; it narrows itself down to the contradiction between precept and practice, which is a matter of daily observation. It looms more largely in Nietzsche's case because of his undoubtedly high intellectual attainments, and also because of his indubitable sincerity. No one who conscientiously studies Nietzsche's life and works can have any doubts on these points. He was no philosophical charlatan, eagerly seeking after public applause or financial gain; he sought truth in season and out of season, even though the publication of his beliefs cost him friends, money, and public esteem, and even though he realised that his unflinching attitude alienated him from his countrymen, and earned him the title of "un-German" (*Ecce Homo*, p. 69). As Lichtenberger says, "His only passion was the search for truth." Now, whence came this immutable purpose, and in what did the contradictory elements take their rise? No satisfactory answer can be given to the problem of Nietzsche's life and opinions,

and the real contradiction between them, if these matters are to be kept rigidly separated. It was because Nietzsche was so greatly influenced by the fluctuations of an unstable nervous organisation that he thought and acted as he did. Indeed, it is almost misleading to speak of anyone being influenced by the condition of his nervous system; what the nervous system (the brain-cells and the nerves) is, that we are, and until this is realised there is no hope for a rational psychology.

Nietzsche himself recognised this fatal error in metaphysics, and in that which so frequently parades under the name of psychology. "Just exactly as the people separate the lightning from the flash," he says, "and interpret the latter as a thing done, as the working of a subject which is called lightning, so also does the popular morality separate strength from the expressing strength, as though behind the strong man there existed some indifferent neutral *substratum*, which enjoyed a *caprice and option* as to whether or not it should express strength. But there is no such *substratum*, there is no 'being' behind doing, working, becoming; the 'doer' is a mere appanage to the action. The action is everything" (*Genealogy of Morals*, pp. 45-46). We are conditioned in regard to our possibilities just as the pendulum is conditioned; but our oscillations have a wider range. Education is limited in its potentiality: you cannot fashion an intellectual man out of an imbecile, no matter how you may strive by education to do so. The whole of psychology must be based upon physiology; otherwise it is less well-founded than the house built upon the sands. It is still the fashion to carp at this view of the matter, and to call it gross or base materialism, but it is almost a certainty that those who cavil in this manner have not taken the trouble to investigate closely the facts upon which this theory is based.

Nietzsche recognised this essential study of the bodily processes as the basis of all rational psychology. "Man did not know himself physiologically throughout the ages his history covers; he does not even know himself now. The knowledge, for instance, that a man has a nervous system (but no 'soul') is still the privilege of the most educated people" (*Will to Power*, vol. i, p. 187). Frequently he returns to this aspect of the matter, and many passages might be quoted to exemplify his views as to what psychology really is; and one of his direc-

tions of attack upon the teachings of Christianity is along the line of proving that "by far the greatest portion of the psychological apparatus which Christianity has used is now classed among the various forms of hysteria and epilepsy."

If we apply these teachings of Nietzsche to himself we shall be in a fair way towards understanding the extremities to which he was carried. But here we meet with the conflicting testimonies of those who have given us accounts of his life. Some writers maintain that Nietzsche was not insane until the beginning of the final breakdown, that is to say, until the latter part of 1888; for example, Mücke, who maintains (41) that "*with the data that we have, however, we must come to the conclusion that Nietzsche's mind was healthy until the end of 1888.*" He admits (42), nevertheless, that "it is at any rate *possible* that Nietzsche was predisposed by heredity"; and he states that "perhaps the origin of his physical and mental ill-health should be attributed to the accident which befel him during his military service, or to the severe dysentery from which he suffered during the Franco-German War." (The accident to which he refers was the injury to the chest already mentioned). Mücke goes on to say that after the year 1881, after which time his purely philosophical works were written, "Nietzsche was comparatively well"; but he adds that "in 1882 he began to take hydrate of chloral," and he admits this "caused him to see men and things in a false light the next morning . . . he again and again struggled to give up the use of that drug" (43). He quotes Chamberlain as saying that the first signs of the fearful malady appeared as early as 1878, "scattering the splendid intellect, and making him the court fool of a frivolous, scandal-loving *fin de siècle*." Halévy, dealing with the period of the onset of the final breakdown, says (44): "Nietzsche's thought has no longer a history, for an influence, come not from the mind but from the body, has affected it. People sometimes say that Nietzsche was mad long before this. It may be that they are right; it is impossible to reach an assured diagnosis."

His sister, Frau Förster-Nietzsche, in dealing with the earlier period of his life, remarks frequently, as we have shown, upon the vicissitudes which he experienced mentally during that time. She seeks to explain them by adducing various factors such as the diseases which he contracted during the Franco-

German War, the drugs which he took, and the dyspepsia which resulted from their use (45). Again, she says: "We assumed that the eye trouble (myopia) was the outcome of indeterminable trouble elsewhere, whereas, now, we know that the former was the chief agent in bringing about the general decline of his health"; and, not content with this quite formidable assortment of causes, she involves emotional stresses. "It should not be forgotten that, with a nature as sensitive as my brother's, spiritual suffering, and such shocks as those which his changed relations to his best friend (Wagner), and the alterations in his convictions and ideals involved, proved much more painful and difficult to endure than bodily indisposition" (46).

Dr. G. M. Gould lays much stress upon the short-sightedness from which Nietzsche suffered even as a child; he maintains that it was the prime cause of the headaches, and that most of his other symptoms—cerebral, neural, digestive, etc.—were secondary to this (47). Nordau's essay on Nietzsche gives one the impression of him as a madman with scarcely a lucid interval; and the shower of invective which he rains upon him does more credit to his power as an anathematiser than to his trustworthiness as a critic. The most biassed of Nietzsche's followers has not reached to such a degree of fervour of admiration as Nordau has attained to in the way of condemnation (48).

It is, however, needless to multiply instances of the discrepancies which exist between the verdicts of the critics. The most interesting point to be noted is the assured manner in which those who have no practical experience in regard to insanity undertake to deal with matters which, one would imagine, require a certain amount of expert knowledge. Everyone is, however, an amateur alienist, but when the question is one of heart trouble or of renal disease, let us say, it is approached with a due sense of the limitation of knowledge on the part of the layman. It is even so when the conditions known as organic changes in the brain and nerves are under discussion. If, however, those more delicately organised, and less stable parts of the nervous system, the functionings of which are called mental, are affected, then everyone may have his say. No special study is requisite, we may infer, where the most complex workings of the nervous system form the subject of debate. This is, of course, a comparatively well-founded

belief where it is a matter of dealing with metaphysical systems involving discussions of the "ego"—that formless, disembodied, elusive ghost. That it is still possible in regard to the discussion of the physiological and pathological changes which underlie—or which are named—mental processes is because the study of these changes is practically still in its infancy. "The study of the mind has passed," says Professor Karl Pearson, "for good or bad, from the poetry of metaphysics to the observation and experiment of the laboratory" (49). This was, as has already been noted, Nietzsche's position, but it is one in which he would be little likely to receive support from his enthusiastic disciples. It would probably prove too "materialistic" for them. Yet this is what he maintained. "All tables of value, all the 'thou shalts' known to history and ethnology, need primarily a *physiological*, at any rate in preference to a psychological, elucidation and interpretation; all equally require a critique from medical science" (50).

It is this "critique from medical science" which is so eminently necessary in the case of Nietzsche. To a certain extent he was able to supply something of the kind himself, but it must be obvious that such introspective analysis must necessarily be limited. When the very part of the organism which carries on this introspection is interfered with by drugs or by disease, then its function must depart commensurately with the extent and progress of the organic change. There are variations in different individuals in their response to morbid as to normal stimuli, yet these variations are not by any means so great as to forbid classification. Thus anyone who will trouble to study Nietzsche's life-history, and then compare it with the descriptions given by a famous countryman of Nietzsche, Prof. Kraepelin, of Munich, or by other alienists, of certain patients who have come under their care, the resemblance will be found to be striking. In Kraepelin's classification, these patients are designated as suffering from maniacal-depressive insanity, that is to say, they alternate between phases of intense abnormal mental excitement and equally marked depression, without adequate external cause, and with, in some instances, between these phases, intervals of apparently normal health. During the excited phase there is an almost feverish desire to compose, to criticise everything, to concoct great schemes; the patient's mood is "arrogant, conceited,

generally condescending, occasionally irritated or apprehensive." He writes, but "only produces fugitive, carelessly jotted-down written work, with numerous marginal notes. Physically, he is well." In the particular case which Kraepelin has been describing there was later a period of depression "with repeated and distressing changes of decision in matters of importance, with incapacity for work, fluctuations of mood, and hypochondriacal disorders" (51). This was apparently the condition from which Nietzsche suffered, at least during the productive years of his life. Here, again, we find the alternation between abnormal excitement and depression; the periods when he went breathlessly on writing, writing, writing, with little apparent attempt to bring about cohesion between one aphoristic utterance and the next; when he left pity, humility, charity, and all that he designated as the "Christian" virtues, the ethical values which meant for him the "slave" morality, far behind him, or merely considered them as useful in so far as they fashioned those in whom they were found into a mediocre, "slave" community, upon whom the "overmen" or "supermen" might batten and flourish. At these times, he is not found complaining of his bodily troubles, of his aches and pains. Not that his health was necessarily robust because he did not complain, but the mental state into which he passed—the irritability of certain areas of his brain-tissue—was too potent to allow even the stimuli from disordered organs to dominate it.

Then there were the periods of depression, times when he was obsessed by his physical ills—"some," as one of his biographers says (52), "imaginary, no doubt, but others real enough." The same writer says of Nietzsche that, during the year 1880, "he became, indeed, a hypochondriac of the first water, and began to take a melancholy pleasure in his infirmities." So marked was this depression at times that he was tempted to commit suicide (53); at others he feared death because it would cut him off before he was able to write down his philosophy; he shunned society, and "longed for the most desert and silent places, for the most complete solitude" (54). He was a chronic drug-taker; he absorbed large quantities of medicines for his real and imaginary diseases, and, "unable to eat or sleep, he resorted to narcotics, and, according to his sister, he continued their use throughout his life" (55).

In alternating states such as these, the "Transvaluer of values," the "Prophet of the Superman," passed the years of his literary productiveness. In 1889, when the final breakdown came, Nietzsche practically passed out of existence as a sentient human being. He lingered on, a human derelict, incapable of any intellectual effort, until 1900.

The presence of mental instability in certain of its forms does not, it is true, preclude the sufferer from arguing rightly and logically, but a knowledge of the existence of such a condition does not inspire us with confidence in the infallibility of his reasoning. In a court of law the evidence of such a one would be viewed with suspicion, and, in the event of his having committed a crime, his responsibility for the act would be a matter for debate. When Swedenborg tells us that Heaven and Hell have been opened to him in visions, when Blake says that he saw the Devil grinning at him in the stairway, or when Cowper states that a voice told him that he was lost and damned for ever, we do not believe straightway that such things are so because we have their word for it. We do not adopt this attitude because we doubt their honesty, but because we are not convinced that they were in such a mental state as to be able to discriminate accurately in these instances between what was actually stimulating their sense-organs, and might rightly be called vision or voice, and what, on the other hand, was giving rise internally to such a commotion in the nerve-cells as to convince them that they were actually influenced from without, whereas, as a matter of fact, it was certainly not so; in other words, they were subject to hallucinations. Nietzsche himself said: "Fancy humanity having to take the brain diseases of morbid cobweb-spinners seriously!" (*Twilight of the Idols*, p. 20). At the same time, and in regard to other matters upon which the mental disorder had no bearing, most of those named were quite sane and reasonable, but their lives from the onset of the nervous derangement were yet to some degree influenced by it—if we consider their whole extent, and not isolated acts.

Within certain limits, then, we may agree with Mr. Mencken when he says (56) that even "if we admit the indisputable fact that Nietzsche died a madman, and the equally indisputable fact that his insanity was not sudden, but progressive, we by no means read him out of court as a thinker. A man's

reasoning is to be judged, not by his physical condition, but by its own ingenuity and accuracy. If a raving maniac says that twice two make four, it is just as true as it would be if Pope Pius X or any other undoubtedly sane man were to maintain it." The analogy is—as analogies so often are—misleading: in the instance given, the assertion is capable of proof, its correctness is assumed because common experience has not tended to disprove it. When anyone diverges from accepted opinion in regard to certain matters, he is looked upon with suspicion—which does not necessarily prove that he is wrong, but that he is divergent; but when Nietzsche asserts that all the opinions commonly known as morality are wrong, many people have a suspicion that what he is trying to prove is not that two and two make four, but that, let us say, they make five! Nor can Nietzsche nor anyone else who makes such a sweeping assertion as that complain if all his credentials are demanded of him before the truth of his statement is accepted. If we grant his premises, we may accept his conclusions; but then we may deny the premises—and this many have already done. Again, we must be permitted to exercise discretion as to how far we shall acquiesce in a lunatic's doctrines, if we shall be governed not only by a consideration of his physical—and consequently of his mental—state, but also we shall wish to know upon what data of experience his system is based. We shall be chary of accepting the conclusions of the tyro in economics, of the quack in medicine, of the amateur alienist in regard to insanity, or of the armchair tactician in matters of strategy, no matter how ardently they may assert their infallibility; with Nietzsche we shall refuse to accept "passion as an argument for truth."

If, however, we ask to be allowed to exercise discretion in regard to what we shall accept as true, and what we shall reject as false, or, at least, illogical, it should not be because we wish to acknowledge only that result as truth which accords with our own limited experience, or which flatters our prejudices. We must remember, too, that in reading Nietzsche when we feel inclined to utter stringent criticisms of a harsh phrase, that perchance it was the utterance of a sick man, and that when he gave vent to it he was looking out upon the world with a jaundiced eye. It is as idle to dismiss Nietzsche as a foolish babbler as it is to give him the position which he arrogated to

himself during his exalted phases. His was a brain of remarkable power ; and the almost random and disconnected utterances which he was able to give forth make it all the more to be lamented that the "sacred fire" did not burn more steadily within him.

Possibly Nietzsche's scheme of things will be judged quite irrespective of his mental state when he evolved it ; if so, considerable injustice will be done to him. The portrait which anyone who is acquainted only with his writings will draw of him is likely to bear little resemblance to the man who actually produced them. Indeed, he himself shrank from even the suggestion of the applicability of certain of his doctrines, as, for example, those in regard to women. It was the appeal from Nietzsche drunk to Nietzsche sober : from the utterer of ferocious sayings under the influence of intense cerebral irritation to the same being when the irritable phase had passed off. It is to be regretted that the exalted, arrogant phases were so predominant. In even the disconnected utterances which are so characteristic, especially of his later writings, there is so much that is valuable in the way of criticism of the general placid acceptance of things simply because they are old or customary, that one wishes he had been allowed to promulgate some coherent system, or that he had been able to criticise his own writings more calmly when the wild fit left him. He would have realised that, for example, the accepted scheme of morality is a product of evolution, or rather that it has evolved in response to the changing needs of mankind ; as a believer in the evolutionary hypothesis, he would have perceived that both man and his moral scheme have gone in a particular direction of necessity for the most part, and but seldom of choice. Nietzsche would have seen that the Will to Power, as he designated what others have called Deity, or *causa causans* or to which some other name has been given, was the driving-power sweeping relentlessly on, and that man, in order to save himself from being engulfed, had to accommodate himself in the best way he could to the torrent. If he called the hasty make-shifts of which he made use "codes of morality," he may yet be satisfied—the will-to-life still remaining—that at the least they have enabled him to survive and to lord it over the other animals. The crude form of society which Nietzsche advocated progression—or return (?)—to would hardly have

appealed to him in a less sanguine mood. He would have felt a little dubious about adopting as a basis for his social reconstructions the rather *ex parte* views of Theognis of Megara, who was unlikely to take a favourable view of the doings of the democracy after they had made things rather unpleasant for him.

Nietzsche's ragings against the moral teachings of the Sermon on the Mount, and against Christian ethics in general, are of use if they make it clear to people that they seldom observe to their full extent the dictates of their accepted code. Some endeavour to follow completely the teachings of Christianity; these are few in number. Others believe that they do so follow them, although actually they do not; and these deceive themselves. Yet others simulate conformity; these are the hypocrites who deceive—or try to deceive—their neighbours. Nietzsche worried himself unnecessarily, however, if he imagined that Christianity, even if it connotes to many a large proportion of quietism, had sapped the energy of men. Events in Europe might have sufficed during his life-time to prove that if the Bible was in one hand—and that hand perchance a "mailed fist"—the sword was grasped firmly enough in the other. Had he lived he would have seen the country which gave birth to Luther well in the forefront of the battle, forgetting neither Bible nor sword, and led, somewhat after the fashion of the Duke of Plaza Toro, by him whom Nietzsche described as a "canting bigot." The day may come when the essential morality of the Christian religion—which is but saying the morality of many high-thinking, honourable men from ages long prior to the Christian era—may be practicable. That it is not so yet is not an argument against it, but, perchance, rather against our over-vaunted civilisation. But that the day will come when Nietzsche's fever dream of the time when the reign of the supermen will begin upon earth we have little warrant and less inclination to believe than that we shall come to a realisation of Utopia, or the New Atlantis, or of the City of the Sun.

Many a stone has been cast at Nietzsche since his first published work appeared; and many of these missiles have been hurled with all the bitterness of ignorance. That much is certain from the crude notions which prevail in regard to his teaching. He is credited with all the pessimism of Schopen-

hauer, though he broke away from the teachings of his master, and though his own doctrine of the further evolution of man into the superman—however pitiless his notions in regard to the means for the attainment of that objective—may be more rightly designated as optimism ; and, to mention no others, he is looked upon by many as one of the apostles of German culture, though he denounces that culture and all its works roundly and in no measured terms. Finally, if the Prussian military party have arrogated to themselves the attributes of the “blonde beast,” and if they consider that by them, as if by an oligarchy of supermen, the *Will to Power* is chiefly to be shown, they will find little warrant for such belief in themselves as the salt of the earth in the writings of Nietzsche. Nevertheless the trend of affairs in Germany of recent years may well serve to illustrate the perniciousness of doctrines which might tend towards such an exemplification as that of a ruling class of Prussian military “supermen” enforcing their will, or “master-morality,” upon the rank and file, the “herd” of the German people, whose actions are influenced by a “slave-morality.” The German nation would resent such an application of Nietzschean rules to themselves ; equally the other European races resent the dominance of the German nation, who also are apparently desirous of becoming something in the nature of supermen in comparison with their neighbours. It is as idle to deny that such inferences might be drawn from Nietzsche’s teaching as it would be to assert that he had any intention of such an application of his doctrines regarding the superman. When he contemplated a further and higher evolution of man, he had not his own countrymen in mind as the highest product of evolution at the present time.

It is almost certain that many who criticise Nietzsche have not troubled to become adequately acquainted with his writings ; and this is likely to continue to be so. His mode of expressing himself in almost disconnected aphoristic paragraphs deters many people from continued study of his writing ; for, however much Nietzsche may have desired to follow in the footsteps of the brilliant La Rochefoucauld, this method is not the best for subjects requiring elaboration. Yet Nietzsche is not an obscure writer, he is no mystic ; there is seldom any difficulty in understanding what he says. It is only necessary to compare him with some of his metaphysical

countrymen—or with metaphysicians of other nationalities for that matter—to realise this. The misfortune is that although the bricks are there, well-formed for the most part and only occasionally faulty in shape, the workman had not the concentration of purpose, the training, or the strength to build them into a coherent whole.

Part III.—Other Views regarding his Mental State.

It has already been shown that Nietzsche's mental trouble was not—as some have wished to prove—confined to the last eleven and a half years of his life, but that the disorganising influence was at work from a comparatively early age. Also it has been admitted that the existence of this instability does not necessarily rule Nietzsche out as a thinker, but it has been pointed out that it behoves us to exercise more than usual caution—especially in regard to his later writings (57)—before we adopt his conclusions. The particular form of mental disorder with which he was afflicted has, it is hoped, been clearly demonstrated. It has been necessary to deal at some length with the earlier attacks, as, when the final breakdown took place in 1889, the later stages suggested to some persons general paralysis of the insane (58): such symptoms as the “convulsions,” the unsteadiness of gait, the alteration of handwriting, the exalted ideas. Even if such a condition had, however, eventually supervened, it does not in any way controvert the facts already adduced in support of the contention that Nietzsche had many years previously exhibited nervous instability. The length of the final stages—eleven and a half years—is also very much against the theory of general paralysis of the insane; it is quite in accordance with what we know of the terminal dementia associated with intermittent insanity (59). Convulsions, apart from other physical signs, are not, as is well known, by any means pathognomonic of progressive paralysis. There are, in addition to those associated with epilepsy, hysteria, etc., those described as idiopathic (60), and Clouston records a rare form of melancholia in which convulsions occurred (61).

Ireland comes to the following conclusion: “His was the condition described as *grübelnsucht*, *folie de doute*, the anguish of doubts.” This was, however, merely one phase of his

morbid history; and, indeed, a little later in the same essay, Ireland draws attention to the other aspect of his mental condition without linking up the phases into what may be described, in Nietzsche's own terminology, as an "eternal recurrence." (This same doctrine of "eternal recurrence" is, by the way, a curiously apposite doctrine for one who was subject to such marked alternating phases.) Ireland thus describes Nietzsche's exalted state: "The restless working of his intellect was always accompanied by exaltation of the affective faculties; the power of correct reasoning slowly decayed, and the bonds of restraint became weaker. This aggressiveness and egotism became more and more prominent" (62).

Mügge informs us that Dr. Binswanger, of Jena, under whose care Nietzsche was for a time, "diagnosed the breakdown as atypical, not progressive, paralysis" (63). From which we gather little as to the actual condition, except that it was *not* general paralysis of the insane; exactly what may be meant by "atypical" is certainly not obvious. It is strange, however, that a fellow countryman of Kraepelin should not have been impressed by the resemblance of the symptoms in Nietzsche's case to those described by Kraepelin.

Nordau apparently also lost sight of the condition in its entirety, and confined himself to describing various symptoms associated with it much as Ireland has done. He speaks of "Nietzsche's intellectual Sadism, and his mania of contradiction and doubt, or mania for questioning. In addition to these he evinces misanthropy or anthropophobia, megalomania, and mysticism" (64). He even goes to the length of stating that "the real source of Nietzsche's doctrine is his Sadism" (65). He bases this theory upon certain passages in which Nietzsche enlarges on the "feeling of content," the "voluptuousness," associated with the infliction of pain. These passages are more particularly to be found in the later works. Even if, then, it were to be admitted that Nietzsche experienced some degree of gratification from the imaginative contemplation of cruelty and the infliction of pain at certain times, it would not warrant the assertion that it formed the basis of his doctrine (66). That many of his sayings justify the inference is none the less true: "Pain is a civilising factor of the first rank; it is the necessary pre-condition, and the inevitable accompaniment, of pleasure and the affirmation of life. This is," says Bloch, "the

central idea of the philosophy of Nietzsche" (67). The misanthropy, the megalomania, and the mysticism which Nordau calls attention to were also merely symptomatic of particular phases, and they were not, as we have seen, invariable characteristics of Nietzsche's mental state.

Mencken says that "from his youth onward, Nietzsche was undoubtedly a neurasthenic"; he draws an interesting comparison between the mental state of Nietzsche and that of Herbert Spencer, and suggests that "each was the victim of specific organic diseases." He adds: "Nietzsche was an hysteric in 1875, and by 1880, as his letters show, he was already exhibiting symptoms of melancholia. . . . Ever and anon the gorgeous egotism of the man would flash forth and give him comfort" (68). This is a frank acknowledgment of the prolonged nature of the nervous disorder from which Nietzsche suffered, and the description of the condition approximates closely enough to that which has been given in the preceding pages for the resemblance to be noticeable.

According to Brandes, it was "at the close of the year 1888 this clear and masterly mind began to be deranged," and he apparently bases this exaltation upon the fact that "signs of powerful exaltation only appear in the last letter but one, and that insanity is only evident in the last letter, and then not in an unqualified form" (69). (Brandes refers here to the letters written by Nietzsche to him.) That this is an unsatisfactory method of deciding the question at issue only needs to be stated to become at once apparent. Yet Nietzsche had stated in an earlier letter (May, 1888): "The history of my springs, for the last fifteen years at least, has been, I must tell you, a tale of horror, a fatality of decadence and infirmity" (70). Nietzsche realised, if others could not, the direction in which he was tending; the end only too lamentably justified his apprehensions.

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- (66) For a description of this perverse mental state see von Krafft-Ebing's *Psychopathia Sexualis*, p. 118 *et seq.*, Eng. trans., 12th edit.; also Iwan Bloch, *The Sexual Life of our Time*, p. 557 *et seq.*
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(1) Communication to the Autumn meeting of the Medico-Psychological Association, St. Luke's Hospital, October 8th, 1914.

The Hereditary Transmission of Epilepsy.⁽¹⁾ By M. ABDY COLLINS, M.D., Medical Superintendent, Ewell Colony for Epileptics.

MR. PRESIDENT and Gentlemen,—The subject that I propose to bring to your notice to-day—namely, the hereditary transmission of epilepsy—is one of extreme interest and importance at the present time in this country, where, owing to recent legislation, public attention has been strongly focussed on the question of transmitted defect. The results that I have obtained have been a matter of considerable surprise to me, and I am anxious to obtain the experiences of others in this matter.

I am dealing with the subject from two points of view—(1) the defects found in the ancestors of my patients, and (2) the presence of epilepsy in the descendants.

I have confined myself entirely to epilepsy in the descendants, as that is a disease in which accurate information is more readily obtained, and, above all, chiefly concerns us. I should like to point out that the various neuroses and minor defects cannot, in my opinion, be accurately estimated, as so little importance is attached to them by relatives that anything like completeness of history is quite unobtainable; but nevertheless no one who frequently interviews the relatives of epileptics can fail to be impressed with the many deficiencies, both mental and physical, that are met with in many of them. On the other hand, however, one does from time to time meet with healthy families and sound ancestry with the epileptic patient as the only evident defect. A large proportion of my cases are late epilepsy, that is, epilepsy starting after twenty-five years of age, and a still larger proportion of cases starting after twenty, that is when we come to consider the married, with whom my figures are chiefly concerned. In these cases alcohol and syphilis have played a prominent part as causative agents, but I cannot agree with the statement that all epilepsy starting after thirty-five years of age is syphilitic in origin, though often it is so. I bring before you figures relating to two series of cases. In the first 177 cases I have traced the ancestry only, and have also divided them into three groups, according as to whether the epilepsy started before ten years of age, between ten and twenty-five years of age, or after twenty-five years.

In the second group of cases, 420, I have particulars regarding epilepsy in the offspring also, and I have separated males from females.

(1) In 177 cases, an ancestral history of defect was obtained in 101 cases, or 57 *per cent.*, but many of the histories were wanting in detail, and the proportion should undoubtedly be much higher. This defect was *alcoholism* in the parent or grandparent in 57 cases, or 32.2 *per cent.* of the total; it was *epilepsy* in the family in 37, or 22 *per cent.*; *insanity* in the family in 21, or 12 *per cent.*; and neurosis recorded in 9.

Dividing these cases into groups, we find—

	Alcohol heredity. <i>Per cent.</i>	Epileptic. <i>Per cent.</i>	Insane. <i>Per cent.</i>
Early epileptics (61 cases)	30	25	12
Adolescent epilepsy (80 cases)	34	16	11
Late epilepsy (36 cases)	34	25	14

As will be seen from these figures, the defect is often more than one factor.

It is striking that adolescent or ordinary idiopathic epilepsy should present the lowest percentage of epileptic heredity, and attention will be called to this later.

(2) To consider now the second series of 420 cases—320 males and 100 females. Of these 320 males a history was obtained from the friends in 261 cases, from the patients only in 54 cases, and not at all in 5 cases, owing to mental defect of the patient. A defect in the ancestors or collaterals is recorded in 162, or 50 *per cent.* Of these it is parental alcoholism in 44 *per cent.*, or 72 cases; it is epilepsy in 46 *per cent.*, or 76 cases, parent or grandparent 32 times, brother or sister 32 times; insanity is given in 74 cases, or 45 *per cent.* There is more than one of these factors in many cases, and both parents were drunkards 10 times, both parents epileptic once, grandparent and parent epileptic 4 times, and grandmother and great-grandmother once. Of the 100 females a defective heredity is given in 52—in the parent or grandparent the defect is present 37 times, and in 8 cases it is a brother or sister. Epilepsy in near relatives is noted in 27 cases—in parent or grandparent 12 times, and in both parents once. (Here all the children are epileptic.) In one case the maternal great-grandmother and grandmother are epileptic, the mother is healthy, and the patient is the only one of a family of eight who is affected; she has had an illegitimate child. Epilepsy in three generations is noted 3 times; alcoholism occurs in the parents 28 times; insane relatives are noted 21 times; in 24 cases the history is deficient, and in 11 none was obtained at all.

The comparative figures for the two sexes are :

	Males. <i>Per cent.</i>	Females. <i>Per cent.</i>
Epilepsy	24	27
Alcohol	22	28
Insanity	23	21

With regard to parental alcoholism, it is noteworthy that of the 72 male cases the heredity is *paternal only* in 54, and of the 28 females it is *paternal only* in 22. This suggests that it is not the alcohol itself which is responsible as a poison, but that the habit of alcoholic excess is due to a nervous deficiency of which epilepsy in the child is only another manifestation.

Next, as regards the offspring of these 420 who are the patients at the present time at the Colony, the most striking point is the small proportion of epileptics who are married; of 320 males 61, or 19 *per cent.* only, and of the females 17, or 17 *per cent.* only, are married.

A year's admissions to all the London County Asylums, who are drawn from the same class, shows that of 1463 males 863, or 59 *per cent.*, and of 1650 females 1045, or 63 *per cent.*, are married. This is a very great difference; and, further, of the 61 married male epileptics in only 20, or about 6 *per cent.* of the total, did the epilepsy start before the age of twenty-five years, and in only 9 cases did it start before the age of twenty years. Only 4 males whose epilepsy started between ten and twenty years of age are married.

Of the females married, only 8 had fits before twenty-five, and 7 of them before twenty years.

These 78 married epileptics have at the present time 197 living children; 10 have had no children.

In 8 cases no information is available; in 44 cases none of the children are affected; in 6 cases fits are recorded in one or more children; and in 10 cases deaths of children from convulsions are recorded (in some cases many of the children). Of offspring actually living who are, or have been, affected with epilepsy only 5 children are recorded, and I have no reason to doubt the accuracy of that figure.

Probably many other defects are present, and epilepsy may occur later in others, but the present condition of 425 patients, with 197 descendants only and 5 epileptics, seems to indicate that other causes than direct heredity of epilepsy must be responsible for the continuance of the malady.

(¹) A paper read before a meeting associated with the International Congress of Medicine, 1913, and published in *Epilepsia*, vol. iv.

Some Considerations regarding the Family History of Insanity in the Highlands.⁽¹⁾ By T. C. MACKENZIE, M.D., F.R.C.P.E., Medical Superintendent, District Asylum, Inverness.

THE Inverness Lunacy District, which was formed after the passing of the Lunacy Act of 1857, comprises the four counties of Nairn, Inverness, Ross, and Sutherland, and is of very large extent. Its area is, roughly, one-third of the total area of Scotland, and includes the greater part of the Highlands. Its population, on the other hand, is extremely sparse, and has been steadily decreasing during the last fifty years. It is a district in which there has been much intermarriage of relatives, and which is less open and accessible than most of the rest of Scotland to the factors that have brought about such great changes in the general life of the country during the last fifty years. In recent years, however, the extension of railways, and the wide use of motor cars, have done much to diminish this degree of isolation and remoteness.

The following remarks relate to 226 cases, 119 male and 107 female, who have been admitted to the asylum during the last four years. The total number of admissions for that period was 613, and out of that number a definite family history of insanity was obtained in these 226 cases. Inquiry was made verbally and also by means of a form, which was sent to the nearest known relative when the patient was admitted, requesting information on matters of personal and family history. The returns in the great majority of cases were definite and reliable, and in many cases was readily verified from the asylum registers. Some were not regarded as such and were discounted, and a few, from the very seriousness of their statements, were not without their amusing side, as in the case of one man, who replied to the inquiry as to whether there had ever been any previous mental disease or disturbance in his family, his sister just having been admitted, that "there was never any such thing, and the family history goes back 800 years and more." We are proud of our descent in the Highlands!

Study of the returns obtained in these 226 cases indicates that the patients may be grouped into four principal divisions, according as—

(1) Relatives had previously been in the asylum, but had been discharged.

(2) Relatives were defective or of unsound mind, but were uncertified.

(3) Relatives were present in the asylum on admission of the patient.

(4) Relatives had died in the asylum.

From the following table it will be seen that in 75 of the cases, or one-third of the total number, there had previously been relatives of the patient in the asylum; in 56, or one-fourth of the cases, there were relatives who were defective or unsound in mind, but had not been certified; in 29, or one-eighth of the cases, relatives were present in the asylum when the patient was admitted; and in 24, or one-ninth of the cases, relatives of the patient had died in the asylum.

Cases with relatives formerly in asylum.			Cases with relatives defective or unsound, but uncertified.			Cases with relatives present in asylum.			Cases with relatives who had died in asylum.		
Male.	Female	Total.	Male.	Female	Total.	Male.	Female.	Total.	Male.	Female.	Total.
40	35	75	31	25	56	16	13	29	15	9	24

In the case of the first group, among the relatives who were found to have been in the asylum and discharged from it prior to the admission of the patient, were 4 fathers, 11 mothers, 19 brothers, 17 sisters, 2 sons, 1 daughter, 16 uncles, 10 aunts, 10 cousins, and others, including a grandmother and a grand-aunt.

In the second group, the relatives included 9 fathers, 14 mothers, 2 daughters, 10 sisters, 12 brothers, 8 aunts, 7 uncles, and other specified relatives, and, in addition, the returns in the cases of 9 patients, not included in the above figures, were to the effect that several members of the family were weak-minded but uncertified.

In the third group, among relatives present in the asylum on admission of the patient were 1 father, 3 mothers, 7 brothers, 6 sisters, 2 daughters, 1 uncle, 1 aunt, 8 cousins, 2 nephews.

In the fourth group, among the relatives who had died in the asylum, were 1 father, 8 mothers, 1 brother, 3 sisters,

1 grandfather, 2 grandmothers, 7 uncles, 2 aunts, 2 cousins and others.

These four groups account for 184 of the 226 cases, and the above figures show that the insane members of the families represented by these 184 cases include 15 fathers, 36 mothers, 39 brothers, 36 sisters, 31 uncles, 21 aunts, and these by no means exhaust the list.

The remaining 42 cases fall into eight groups, in six of which two of the original groups are combined, and two of which contain three of the original groups.

The six are as follows :

Cases with relatives— (a) Formerly in asylum. (b) Unsound but uncertified.			Cases with relatives— (a) Present in asylum. (b) Formerly in asylum.			Cases with relatives— (a) Present in asylum. (b) Died in asylum.		
Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
3	9	12	3	4	7	3	3	6

Cases with relatives— (a) Present in asylum. (b) Unsound but uncertified.			Cases with relatives— (a) Formerly in asylum. (b) Died in asylum.			Cases with relatives— (a) Died in asylum. (b) Unsound but uncertified.		
Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
5	1	6	1	3	4	1	2	3

In these six compound groups, representing 38 cases, among the relatives in the families involved are 5 fathers, 9 mothers, 13 brothers, 15 sisters, 2 sons, 11 uncles, 7 aunts, 12 cousins, 3 nephews, 2 nieces.

Of the four remaining cases, 3—1 male and 2 females—had relatives who (a) had formerly been in the asylum, (b) were unsound but uncertified, (c) were present in the asylum on admission of the patient.

The relatives in this group included 1 mother, 3 brothers, 3 sons, 3 sisters, and 1 cousin.

The last case is that of a female, whose grandmother and maternal aunt died in the asylum, whose nephew was in the asylum when she was admitted, and whose father and two brothers were of unsound mind or defective, but uncertified.

In the great majority of the cases, 166 out of 226, the patients were first admissions, but the total number of cases includes 38 with one previous admission, 12 with two, 5 with three, 2 with four, 2 with five, and 1 with eleven previous admissions.

The foregoing facts in relation to the family history of patients admitted to the asylum in recent years suggest the conclusion that a comparatively small number of families and individuals within the district is responsible for a relatively high contribution to the total number of cases coming under care and treatment ; in other words, that in the general population there are certain strains, the members of which are specially prone to mental disease.

With regard to the main types of mental disease most prevalent within the district, analysis of the 765 cases admitted during the last five years, in all of which the diagnosis of the mental condition has been made by myself, shows that 408 were cases of melancholia, 200 of mania, 97 of dementia, 37 of congenital mental deficiency, 20 of general paralysis, and that 3 patients were returned as not insane. Epilepsy was found in 21 of the cases.

In conclusion, I think the fact is worth recording that at present there are in the Inverness District Asylum only six cases of general paralysis, in an asylum population of over 700, and that the patients are all males. It is of much significance that they have all spent many years of their lives out of the Highlands, one as a seaman all over the world, one in Johannesburg, two in America, one in Glasgow and Liverpool, and one in Glasgow and Edinburgh.

(¹) Abstract of a paper read at the Annual Meeting of the British Medical Association, Aberdeen, 1914.

Crime, Alcohol, and other Allied Conditions in Staffordshire. By M. HAMBLIN SMITH, Medical Officer, H.M. Prison, Portland.

THE relations between alcohol and criminality have been considered by many students of such subjects, and figures relating thereto have been worked out by more than one observer. But these figures have applied either to some large city, or to England and Wales as a whole. No statistics have

been (so far as I know) compiled for such a county as Stafford. In this paper I have endeavoured to supply this omission, having had some opportunity of considering the question while serving as Medical Officer of H.M. Prison at Stafford. The county of Stafford is, in some respects, peculiar, inasmuch as the density of its population varies greatly in different districts, and its industries are very diverse. The extreme south of the county abuts on Birmingham, and considerable parts of the county area are now contained in "Greater Birmingham." In the south and south-west of the county are the various towns and districts which make up the "Black Country." Towards the north of the county lies the densely-populated area of the "Potteries." Mining districts are scattered in various parts, and there are two boroughs with distinctive industries of their own—Stafford (boots and shoes), and Burton-on-Trent (the metropolis of beer). The remainder of the county consists of agricultural and grazing land.

The criminal statistics have been dissected by dividing them into classes corresponding to the police-courts from which the offenders were committed to prison. As a consequence parts of the county had to be eliminated, for the Birmingham district, Burton-on-Trent, and a small part of the extreme south-west of the county only commit cases to Stafford Prison for trial at Assizes and Sessions. But there remains a large and varied district with a population of nearly a million inhabitants (921,000). This district I have divided into the following areas, the populations being those of the 1911 census, reckoned to the nearest thousand :

	Population.
(1) <i>The "Black Country"</i> —comprising the county boroughs of Wolverhampton and Walsall, and the petty sessional districts of Wolverhampton, Willenhall, Bilston, and Sedgley	317,000
(2) <i>The "Potteries"</i> —i.e. the county borough of Stoke-on-Trent	235,000
(3) <i>"Mining districts"</i> —comprising the borough of Newcastle-under-Lyme, and the petty sessional districts of Pirehill North, Rushall, Penkridge, and Cannock	176,000
(4) <i>"Agricultural districts"</i> —comprising the borough of Tamworth, and the petty sessional districts	

	Population.
of Cheadle, Eccleshall, Stone, Uttoxeter, Tamworth, and Stafford (not including Stafford Borough)	86,000
(5) " <i>Mixed districts</i> "—to some extent agricultural, but also contain a number of mining villages; they comprise the city of Lichfield, and the districts of Rugeley and Lichfield	44,000
(6) <i>Stafford Borough</i> —a manufacturing town	23,000
(7) <i>Leek</i> —this is mainly an agricultural and moorland district, but the population is largely composed of the silk-manufacturing town of Leek	40,000
	<hr/> 921,000

Of course this, like any other classification, is more or less imperfect. But I venture to contend that the districts as arranged above have each special characteristics which differentiate them from each other.

There is a considerable Irish element in the population of the Potteries, and I am informed that a number of the Leek people have French blood in their veins, being descended from Huguenot refugees. There is a small coal-field in the Cheadle district, and a number of colliery villages near Tamworth, but in the county of Warwick. The bearing of these two last facts will be seen later.

The period of which I have brought under review comprises the years 1911, 1912, and 1913. I have selected this period for three reasons: (a) It was necessary not to take too long a period, in order that administrative conditions might be similar; (b) the pottery towns were federated into a county borough at the end of 1910; (c) the period nearly corresponds with my tenure of office at Stafford.

The railway strike occurred in 1911, and the coal strike in 1912; the latter greatly affected Staffordshire. But neither of these events had any appreciable effect on the criminal statistics, which show a remarkable uniformity for each separate year.

I would remark that the boroughs of Stoke-on-Trent, Wolverhampton, Walsall, and Newcastle-under-Lyme each maintain a separate police force. The rest of the area is policed by the county police force.

Classification of the offences.—I have divided the offences into two main classes—"alcoholic" and "non-alcoholic"—on the consideration as to whether or not alcohol usually figures as an immediate cause of the offence. No such classification can, of course, ever be wholly accurate ; some offences placed under either heading should properly be under the other. But such cases of erroneous classification would probably be found to balance each other in the long run ; and I venture to think that my classification is not an unreasonable one. Both classes have various sub-divisions, arranged as follows :

(A) *Alcoholic offences, i.e.*, offences in which alcohol is invariably, or very frequently, an immediate cause.

(1) Drunkenness, including "drunk and disorderly," "drunk and riotous," "drunk on licensed premises," etc.

(2) Assault, including "indecent assault" and "wounding" in its various degrees.

(3) Wilful damage.

(4) Neglect of, and cruelty to, children.

(5) Other offences, such as indecent or obscene language, indecent exposure, etc.

(B) *Non-alcoholic offences, i.e.*, offences in which alcohol is not usually an immediate cause.

(1) Burglary, including shop and warehouse-breaking, and attempts thereat.

(2) Larceny, including "receiving," "obtaining goods by false pretences," and similar offences.

(3) Vagrancy offences, including begging, sleeping out, disorderly conduct in the workhouse, etc.

(4) Other offences—a miscellaneous lot, comprising trespass, gambling, and various other minor matters.

I have omitted all debtors and other "civil process" prisoners, and, after some consideration, I decided to omit persons sent to prison for failure to pay maintenance and bastardy arrears, and for offences against the School Acts.

I have placed prostitution in a separate category. No doubt it is often combined with drunkenness ; but it is so difficult to say whether alcoholism is the cause or the result of the prostitution that I judged it best to classify these offences separately.

The number of prisoners coming within my classification for the three years was 9,341 (males, 7,509 ; females, 1,832), and give the following figures :

TABLE A.—*Males.*

	Offences.									
	Alcoholic.						Non-alcoholic.			
	Drunkenness.	Assault.	Wilful damage.	Neglect of children.	Other alcoholic offences.	Total of alcoholic offences.	Burglary.	Larceny, etc.	Vagrancy offences.	Total of non-alcoholic offences.
Black Country .	678	326	69	78	226	1377	57	534	232	1230
Potteries . .	999	248	31	111	178	1567	50	383	453	1038
Mining districts	216	105	18	38	48	425	17	128	126	357
Agricultural districts . .	226	39	12	14	42	333	7	115	139	316
Mixed districts .	135	27	6	18	22	208	4	86	50	181
Stafford Borough	131	13	5	12	14	175	2	54	27	117
Leek district .	56	11	3	2	5	77	7	56	32	108
Total . .	2441	769	144	273	535	4162	144	1356	1059	3347

TABLE B.—*Females.*

	Offences.										
	Alcoholic.						Non-alcoholic.				
	Drunkenness.	Assault.	Wilful damage.	Neglect of children.	Other alcoholic offences.	Total of alcoholic offences.	Burglary.	Larceny, etc.	Vagrancy, etc.	Other non-alcoholic offences.	Total of non-alcoholic offences.
Black Country .	241	80	19	53	141	534	—	96	22	28	146
Potteries . .	255	34	6	53	106	454	5	55	31	7	98
Mining districts	47	6	3	12	12	80	1	17	9	4	31
Agricultural districts . .	35	—	1	9	7	52	—	8	9	—	17
Mixed districts .	44	1	—	5	14	64	—	18	12	1	31
Stafford Borough	38	3	—	5	11	57	—	10	7	1	18
Leek district .	10	1	—	—	—	11	—	5	—	—	5
Total . .	670	125	29	137	291	1252	6	209	90	41	346
											234

TABLE C.—*Giving the Percentage of "Alcoholic Offences" to the Total Number of Offences.*

	Male percentage.	Female percentage.
Black Country	52	75
Potteries	60	82
Mining districts	54	72
Agricultural districts	51	75
Mixed districts	53	69
Stafford Borough	59	76
Leek district	41	68
Whole Area	55	78

The percentages for the males agree very closely with the results obtained by Dr. J. Baker from the records of Pentonville Prison (*Proceedings of Brussels Penitentiary Congress*, 1900). The great influence of alcohol on female crime will be noticed.

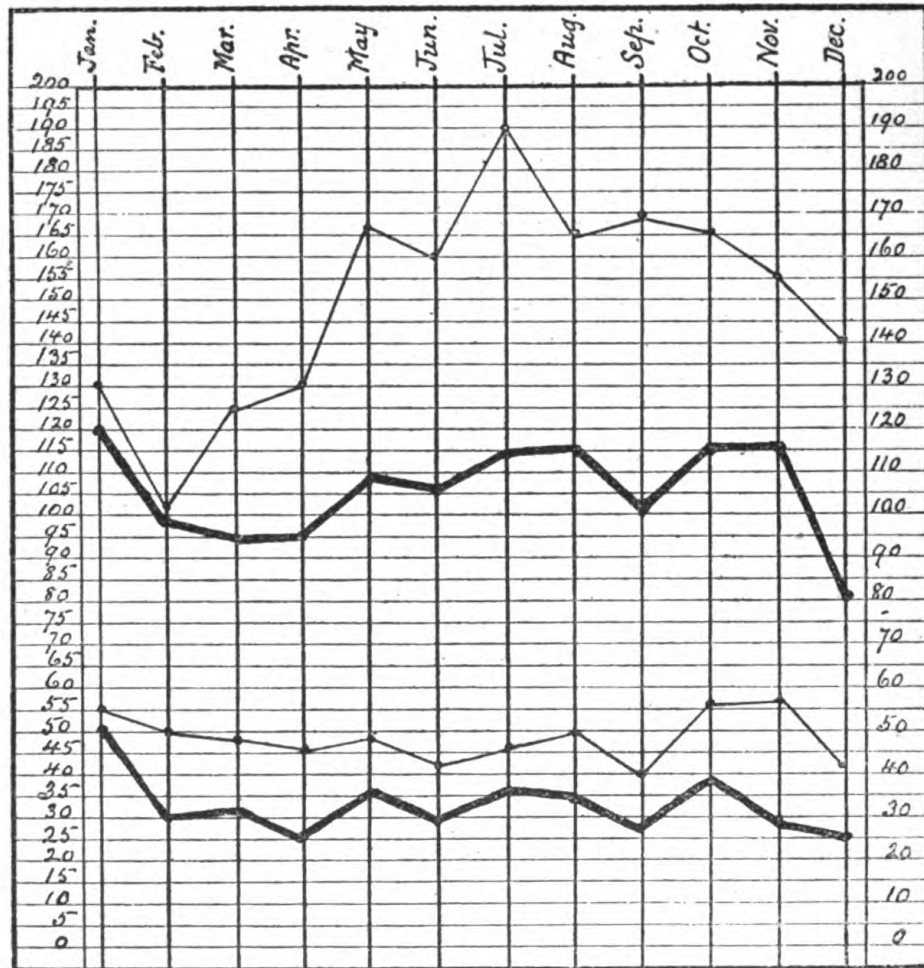
The alcoholic monthly averages show a rise during the early months of the year, and a fall when the summer is over. The curve for all non-alcoholic offences is much the same as that for the alcoholic. The curve for offences against property (burglary and larceny) is fairly constant throughout the year. The peculiarity of the vagrancy curve is that it reaches its highest point in January and its lowest point in December; probably this is due to the effect of charity before and during Christmastide.

Comparison between the Incidence of Offences in Different Districts.

Deductions here must be drawn with great caution. In comparing the different figures it must be remembered that (1) Police methods as to the arrest of offenders (particularly of drunken offenders) vary; (2) Courts deal with offenders in very diverse ways. Some courts make far more use of the "probation" system than others do; and the figures only represent those offenders who are sent to prison.

The first point which comes out from a perusal of these tables is the extremely bad figures given by Stafford Borough. In this connection it must be remembered that (1) the totals

Diagram showing the Monthly Averages of Various Classes of Offences (Male and Female together).



Upper thin line—all alcoholic offences. Upper thick line—all non-alcoholic offences. Lower thin line—larceny and burglary. Lower thick line—vagrancy.

are small, (2) the town is exceptionally well policed, (3) a large amount of young female labour is employed in the shoe factories, (4) possibly some of the prisoners from other districts do not leave the town when released, but remain to commit fresh offences within the borough.

The figures for the Potteries are bad. The population in

TABLES D and E, giving the Average Yearly Numbers per 100,000 of Population sent to Prison for Various Classes of Offences from the Different Districts.

TABLE D.—Males.

TABLE E.—Females.

	All offences.	All alcoholic offences.	All non-alcoholic offences.	Assault.	Burglary and larceny.	All offences.	All alcoholic offences.	All non-alcoholic offences.	Assault.	Burglary and larceny.
Black Country	274	144	129	34	62	80	56	15	8	10
Potteries	369	222	147	35	61	94	64	13	4	8
Mining districts	147	79	67	19	27	23	15	5	1	3
Agricultural districts	250	129	122	15	47	27	20	6	—	3
Mixed districts	294	157	137	20	68	84	48	23	—	13
Stafford Borough	423	252	169	18	81	117	82	26	4	14
Leek district	154	64	90	9	52	12	9	4	—	4
Whole of area	272	150	121	27	54	66	45	12	4	7

this district is badly paid and ill-housed, and a large amount of female labour is employed.

The agricultural districts give satisfactory results, and the very low figures for the Leek district are very striking.

The figures for the mining districts are low, and this does not agree with the statistics published for what are termed "mining counties." The fact is that the word "mining" as applied to a *county* is misleading. Mining may be a prominent industry in a county, but there are always other important industries; and the mining population will always be found grouped in large villages. It must also be remembered that the miner is a well-paid worker, and probably, in many cases, pays his fine instead of coming to prison. Also no female labour is employed about the coal mines.

I have worked out the numbers of those committed for alcoholic offences who were born outside the district in which they were convicted.

The information as to birth-place depends on the prisoner's own statement, and is probably in many cases erroneous. The labour involved in getting out the figures was considerable. Unfortunately, I was moved from Stafford before I had time to obtain the information for other classes of offences. Still, the

TABLE F.—*Percentage of Alcoholic Offenders born outside District of Conviction.*

	Males.	Females.
Black Country	22	20
Potteries	38	35
Mining districts	52	70
Agricultural districts	65	86
Mixed districts	77	79
Stafford Borough	67	71
Leek district	40	81
Whole area	40	38

figures, as far as they go, are interesting. They bear out what I said above as to one possible cause of the high criminal figures for Stafford Borough. The high figures for the mixed districts are due to the presence of a large military garrison in Lichfield.

I venture to think that this line of inquiry is worth following up on a larger scale in other places.

Occupations of prisoners.—Very little stress can be laid on the occupations given by prisoners on reception. The great majority of the men describe themselves vaguely as "labourers." But I have enumerated the men who described themselves as "miners" or "colliers." These men give the following figures :

TABLE G.—*Offences committed by Miners.*

	All alcoholic offences.	Assault.	Burglary and larceny.	Vagrancy.	Other non-alcoholic offences.
Black Country	141	37	45	18	21
Potteries	356	84	89	42	34
Mining districts	128	40	40	18	22
Agricultural districts	35	7	11	7	7
Mixed districts	26	10	12	—	4
Stafford Borough	4	1	3	—	—
Leek district	2	1	1	—	6
	692	180	201	85	94

A number of the offences in the last column of this table were for poaching.

In the agricultural districts, more than half of these cases of "miners" were committed to prison from Tamworth. These were probably men who lived over the county border in Warwickshire.

I am rather doubtful as to the correctness of the description of "miner" given by many of the vagrancy cases.

I have been unable to obtain any accurate statistics of the number of men actually employed as miners in the area with which my figures deal.

Statistics of pauperism.—These have been obtained from the Local Government Board's half-yearly statement for the paupers relieved on January 1st, 1914. A complete comparison with the criminal statistics could not be made, for the Poor Law Union areas differ in some cases materially from the petty sessional districts. So far as a comparison can fairly be made, the following figures are given for my areas :

Area.	Number of paupers per 100,000 of population.
Black Country	2,254
Potteries	2,380
Mining districts	1,927
Agricultural districts	1,749
Mixed districts	1,754
Whole area	2,190

The figures for Stafford Borough could not be given separately, as for Poor Law purposes Stafford is contained in a large country union. The Leek Union differed so greatly from the Leek petty sessional district that any attempt at comparison would have been unfair.

The figures show a high rate of pauperism where there is a high rate of "alcoholic" offences (and hence presumably a high rate of drunkenness). There is nothing strange or novel in this conclusion.

Statistics of insanity.—These have been taken partly from the Local Government Board's statement, and partly from information most kindly supplied by the Superintendents of the Staffordshire County Mental Hospitals. So far as comparison with the criminal statistics go, these figures are subject to the same limitations as were the statistics of pauperism.

Area.	Numbers per 100,000 of population.			
	Insane paupers in asylums and other institutions.	Total number of insane paupers relieved.	Average yearly admission rate into asylums.	
			Male.	Female.
Black Country . . .	292	316	29	27·6
Potteries . . .	330	348	35·2	32·7
Mining districts . . .	198	212	28·8	20·4
Agricultural districts . . .	239	250	20	28·5
Mixed districts . . .	215	230	23·1	27·5
Whole area . . .	295	315	28·6	27·8

On the whole, these figures present a marked similarity to those given by the pauperism statistics, and those for alcoholic crime.

The peculiar differences for the male and female admission rates in the mining, agriculture, and mixed districts will be noted.

Conclusions.—We are, I think, justified in cautiously making the following deductions:

(1) Alcohol is directly responsible for more than half of the male prison receptions, and for a much larger proportion of female receptions.

(2) Densely populated areas give the highest proportion of alcoholic offences. This is especially the case where the workers are ill-paid, and particularly where much female labour is employed.

(3) A high rate of alcoholic offences is usually, but not invariably, accompanied by a high rate of non-alcoholic offences, and by a high rate of crimes of violence, of pauperism, and of insanity.

(4) That there is no very marked relation between pauperism and crimes against property.

I am indebted to the Prison Commissioners for permission to publish this paper. And my best thanks are due to Dr. J. W. S. Christie, Dr. J. B. Spence, and Dr. W. F. Menzies, of the Stafford, Burntwood, and Cheddleton Mental Hospitals, for their great kindness in obtaining some of the insanity statistics for me; to Dr. A. Salter, for assistance in obtaining the statistics of pauperism; and to Dr. W. C. Sullivan, of the Criminal Lunatic Asylum at Rampton, for much kindly criticism and encouragement.

Clinical Notes and Cases.

A Case of Recurrent Purpurial Eruption.⁽¹⁾ By Dr.
J. O'C. DONELAN, Medical Superintendent, Richmond
Asylum, Dublin.

THE case I venture to bring under your notice has been a subject of much interest to me for some time past, chiefly because of its obscurity, and now, with a view to obtaining some information rather than throwing light on the subject, I will give you its main features.

The patient was admitted to the Richmond Asylum, at the age of thirty, suffering from *mania a potu*, in July, 1899. He soon recovered, and resumed his occupation of car-driver. About nine months after he was again admitted, and discharged in a few months. From the notes he appears to have been first excited, violent, and restless, with hallucinations; then melancholic, and gradually regained his normal mental balance, which was about the average of men of his class. He was again admitted in 1901, suffering from his old complaint, but all symptoms much worse than on the previous occasions; hallucinations of sight and hearing were vivid and terrifying, he was acutely suicidal, yet took his food fairly, and no organic defect was detected. After a little he quieted down pretty well, but became extremely incoherent in his speech, yet able to answer a definite question, and he began to do some general work about the ward. No particular change was noticed in his mental or physical condition for a long time.

About three years ago, he began to develop a strange mixture of delusions of exaltation with those of depression, such as one often finds in general paralytics, stating that he owned great property, wealth, and horses, and generally promising great gifts at one moment, and the next complaining that he had been robbed, was destitute and miserable. Gradually he seemed to lose these definite delusions; he ceased to be able to occupy himself, and his mental state might be described as mild secondary dementia.

At this time he used to walk aimlessly about the recreation ground, earnestly but most incoherently discussing matters unto himself. It was noticed one day that his face was extremely flushed, and, on examination, his body was found to be covered with a bright red rash, while his legs and arms were of a dusky hue, with minute petechiæ at the roots of the hairs, and irregular patches of subcuticular hæmorrhages over shins and flexor aspect of forearms. His temperature, pulse, and respiration rates were normal, and nothing abnormal was detected about his heart. He was put to bed for observation, and in the course of about twenty-four hours the bright rash had almost disappeared, leaving a purpurial mottling, which soon began through various colourings to fade away. There being practically no constitutional disturbance, it

seemed to be a trifling matter, which had passed off. He was then ordered up, but within an hour or two the rash reappeared, and the purpuric state of his legs, arms, shoulders, and chest became even more marked than in the first attack. It was then noticed that his gums seemed rather soft, and the condition was believed to be of the scurvy class. He was put on lime-juice and iron and kept in bed, when, as previously, recovery soon took place. Particular pains were taken to ensure his having abundant vegetable dietary with his meat, but, to our surprise, when he left his bed for even an hour or two, the flushing and purpuric condition reappeared, and for quite two years it was found that whenever he was out of bed for any length of time he developed this peculiar condition.

Quite lately, some improvement has taken place so that it takes a day or two to bring on the rash, and it is not so alarming-looking as it used to be. Throughout there was not any marked tendency to hæmorrhage from mouth or nose. His appetite was fairly good, digestive functions and sleep of about average, pulse-rate usually but not invariably increased to 85 or 90 with the onset of the rash. His normal pulse-rate is about 70, and when in bed occasionally I have found it as low as 58. Knee and eye reflexes were normal, while examination of the blood revealed no abnormality. His skin is rather harsh, dry, and inclined to be scaly, particularly about the elbows and knees, but not to any greater degree than one frequently finds amongst the insane. At present he is in a state of partial dementia; he can answer pretty clearly regarding events previous to his mental breakdown, but his mind is utterly blank as to recent occurrences.

As to the physical nature of the case, I must admit that I feel quite at sea, and I have failed to find out much light on the subject. If the purpuric state occurred on the legs only when the patient was going about, a simple explanation, of course, would be that gravity raised the blood-pressure in the limbs, causing the extravasation from the arterioles of the skin, but would not account for the condition on the back of the shoulders, neck, and arms, or the flushed state of the face and head. Vaso-motor paralysis might be suggested, but then why should it occur when the patient was about, and disappear when recumbent? The blood itself was not found to be abnormal, nor did the patient look anæmic at any time.

(¹) A Paper read at the Autumn Meeting of the Irish Division on November 5th, 1914.

DISCUSSION.

Dr. RAINSFORD pointed out that purpura and other skin eruptions were of frequent occurrence in imbeciles and idiots of whose ailments he had large experience. He considered the condition met with in Dr. Donelan's case due to alcohol. There was no external hæmorrhage, no rise of temperature, which was remarkable. The case might possibly be one of "peliosis rheumatica," but in this condition

there would be a rise of temperature. The rash did not occur after maniacal excitement.

Dr. EUSTACE wished to know if bromides had been administered, as he had seen purpuric rashes appear after the exhibition of this drug in small doses, and whether the rash had the appearance and characteristics of urticaria?

Dr. REDINGTON said that in two cases of mania in his practice he had observed a rash of a purpuric character.

Dr. GAVIN was of the opinion that the eruption was not caused by alcoholic excesses in the patient, but was due to a vaso-motor disturbance.

Dr. GREENE thought the paper was of great interest. He said he was not a pathologist, and therefore he spoke with reserve on a very difficult question, but it appeared to him that the symptoms described all pointed to an affection of the arteries of the skin. If the internal blood-vessels were affected, those of the brain would undoubtedly have suffered by the disease, and have produced apoplexy, thrombosis, etc. The hæmorrhagic spots he assumed were caused by effusions from those blood-vessels which were especially supported by the musculature. He believed the condition of Dr. Donelan's patient to be due to toxæmia, to which was added the mechanical influence of muscular action in the superficial blood-vessels, causing extravasation and increased blood-pressure in this individual case. He contrasted the symptoms of cases of *purpura hæmorrhagica* under his care with the symptoms present in Dr. Donelan's case.

Dr. LEEPER said that from the history of the case it appeared to him that, owing to the alcoholic origin of the mental conditions, the patient's blood-vessels were diseased, and that a hæmolytic action was set up which produced the extraordinary rash described.

Dr. DRAPES contrasted the symptoms of *scorbutus* with those of *purpura hæmorrhagica* with reference to Dr. Donelan's case.

Occasional Notes.

The Annual Meeting.

THE Annual Meeting, held in the ancient and historic city of Norwich, will rank amongst the most pleasurable memories in the minds of those members who were fortunate enough to be able to attend. The full literary programme it was found impossible to carry out, partly from lack of time, and partly because they were glad to exchange the task of intellectual effort, owing to the rather oppressive atmosphere which prevailed indoors, for the more alluring social amenities which were so generously provided for them by the kindness of their hospitable friends of Norwich.

There are abundant features of interest to be found in the old city and its neighbourhood. It is particularly rich in buildings of architectural beauty, its magnificent cathedral taking the lead, with its adjoining close, which were visited by probably all the members. There are also many other churches of great beauty, and the "Strangers' Hall" was a centre of general interest, with its wonderful collection of relics of a

distant past, many of them grotesque and with weird and grumous associations. Norwich is a wonderful rose country, and one of its special attractions in the summer season is the wealth of bloom and the delicious fragrance with which the whole region is permeated. It might well take the Duke of Richmond's motto as its own—*En la Rose je fleuris*.

The presidential address was worthy of the occasion and of the man. The selection by the Association of the chief officer of the Norfolk County Asylum as President, and its county town as the seat of the Annual Meeting, was an appropriate way of celebrating the centenary of the foundation of its asylum. Dr. Thomson has for many years taken an active part in the proceedings of the Association, of which he is one of the most honoured members. He has raised the institution with which he has been so long connected to a position of one of the best managed asylums in the country. Over and above what may be called his ordinary work he has interested himself largely in the promotion of the further education of those who purpose taking up psychiatry as their special branch of medical practice, and has served on a committee having that object in view, particularly as regards the granting by universities of diplomas in psychiatry. Efforts in this direction have been attended with very substantial success, a result which Dr. Thomson and those who co-operated with him deserve to be heartily congratulated upon.

The keynote of Dr. Thomson's address is to be found in his opening remarks: "The commemoration of a centenary is a hollow and useless proceeding unless, from a study of the period under consideration, we gather and apply the wisdom it teaches, and realise that it is merely a *point d'appui* for future advance and extension." In endeavouring to fulfil this object he set himself no easy task. Yet those who heard the address, and that larger audience who have the opportunity of reading it in the pages of this Journal, will be prepared to admit that he achieved his purpose admirably. The address is, in fact, a deeply interesting summary of the progress of psychiatry during the past century, at the commencement of which psychiatry can hardly be said to have existed, and it may be looked upon as almost the very youngest scion of the tree of medicine. The tough, obstructive soil and undergrowth which, in the form of baneful though time-honoured views as to the nature of

insanity, prevented its emergence had first to be cleared away, and it was only when the doctrine of demoniacal possession as the cause of insanity was questioned, and ultimately abandoned, that psychiatry as a science became possible. The cruelties practised on the insane by way of treatment were mainly the result of the doctrine of possession. Men's actions, as a rule, conform to prevailing opinions, and, as Lecky, when speaking of witchcraft, finely says: "There are opinions that may be traced from age to age by footsteps of blood; and the intensity of suffering they caused is a measure of the intensity with which they were realised." However, it was the sufferings of the insane, rather than suspicion of the untenability of the popular doctrine as to the cause of insanity, which in the first place appealed to the kindlier feelings of compassionate persons. And so, as pointed out in the address, in this, as in other movements of social reform, the philanthropist preceded the scientist.

Dr. Thomson gives a concise but lucid *résumé* of the various important legal enactments bearing on the care and treatment of the insane, the most important of which was the Act passed in 1845 establishing the Lunacy Commission, an Act which he designates as the "Magna Charta" of the insane. And there are probably but few who would refuse to acknowledge the whole-hearted manner in which that important body has striven to develop the greatest efficiency in the management of our asylums. Dr. Thomson, in commenting on the provisions of the Local Government Act of 1898, which transferred the control of asylums from the magistrates to a Committee of the County Council, speaks of the apprehensions felt at first that "the management might degenerate to the Poor Law institution level," the falsity of which, he says, experience has proved; and concludes that "we can say that the people's representatives have governed our asylums at least as wisely, sympathetically, and generously as their predecessors."

In dealing with the progress in knowledge of the nature and treatment of insanity, Dr. Thomson makes a useful division of the century into four equal periods, each characterised by some special element of advance. The first of these witnessed the dawn of legal enactments for the benefit of the insane without any recognition of insanity as a disease of the brain. The second was characterised by the abolition of mechanical

restraint and coercive measures generally, and in this connection he assigns the premier place to Mr. Gardiner Hill, assistant in the Lincoln Asylum. An important incident of this second period was the founding of the Medico-Psychological Association in the year 1840, which gave a great impetus to the then recently adopted view that insanity was the outcome of disease or disorder of the brain. During the third period asylums attained a very high degree of excellence, as Dr. Thomson says, "all reasonable perfection." The fourth period had for its distinguishing feature the institution, on the initiative of the Association, of an organised system of training of nurses and attendants, and the granting of certificates of proficiency in mental nursing; also the establishment of pathological laboratories in many of the large asylums, and, finally, the inducing of several of our universities to grant diplomas in psychiatry, in which Dr. Thomson himself took a great personal interest, and with which the name of Dr. T. W. McDowall will be for ever associated. This division into chronological periods constitutes a valuable aid when we endeavour to recall the successive stages in the progress of psychiatry.

One could not desire a better illustration of the march of modern ideas as to the treatment of insanity than to walk through the wards of Norfolk County Asylum. Especially noteworthy is the "Nurses' Home," not long erected, a really home-like snuggerly, to which the nurses can retire when off duty. Perhaps there is no more striking mark of the progress of psychiatry than the modern asylum nurse or attendant, as contrasted with the old-time "keeper." Devoid of sympathy, brutalised by their surroundings, these latter were the very worst class of persons to whom any of God's afflicted creatures could be entrusted. The asylum nurses of the present day are, as a body, characterised by a humane disposition, reasonably and sufficiently educated, competent, and sympathetic towards their patients; their training is on the lines of that of a general hospital, modified, of course, so as to meet the special demands of asylum nursing, and altogether on a vastly higher plane than was even dreamed of less than a century ago. They are, therefore, well worthy of the kindest consideration, and the comparatively small outlay involved in making their position one of comfort and contentment is money well spent, and probably in the end economical.

In the discussion on Dr. Gettings' paper on "Dysentery Carriers," one or two points of interest were raised. Dr. Menzies called attention to the necessity for distinguishing between chronic cases of dysentery and actual dysentery carriers. "The true dysentery carrier was the person who always had normal-looking stools and showed no symptoms of dysentery, either during life or *post-mortem*. The chronic dysenteric case had loose stools, either always or generally; sometimes a little mucus, and, rarely, blood." He considered there was no positive evidence as to the spread of this disease by carriers. In this opinion the majority of the meeting seemed to agree. There was not quite the same unanimity as regards the usefulness of hyoscine in the treatment of the insane, which was the subject of a short paper by Dr. Daniel. The outcome of the discussion was to leave the impression that while in cases of very acute mania it was often of signal benefit, it is a drug which cannot be given for any length of time without producing dangerous symptoms. The discussion on the Report of the Status Committee was one of the most important and interesting items on the programme. Criticism took mainly the shape of doubts as to the feasibility of some of the proposals it embodied, but on the whole the report met with the warm approval of the members generally.

The entertainment of the members during their hours of ease was well provided for. Grateful acknowledgments are due to the President and Mrs. Thomson, who took the utmost pains to make the meeting the success it undoubtedly was; to the Chairman and Committee of the County Asylum, who very hospitably entertained the members to lunch; and to the Mayor and Corporation for kindly placing the Guildhall at their disposal for the holding of meetings. Dr. and Mrs. Thomson's At-Home on Tuesday, the 14th, was one of the pleasantest incidents of the occasion. The weather, on the whole, was on its good behaviour with the exception of Wednesday, the central day of the meeting. On that day Dr. and Mrs. Rice kindly invited the members to afternoon tea at the Norwich City Asylum, which, owing to the persistent downpour, had to be enjoyed indoors. Perhaps the most enjoyable episode was the trip on the Broads on Thursday, the unique and picturesque scenery of that part of East Anglia being quite a new experience for the large majority of the party. The

day was perfect, and it was an unalloyed pleasure to laze at ease in a comfortable steam launch as it threaded its way along the labyrinthine meanderings and lake-like expansions of the river Bure. It happened that there was a regatta on Wroxham Broads on the same day, which added to the interest of the excursion. There was an ideal breeze for a yachtsman, and there could hardly be a prettier sight than the various units of the little white-winged fleet as they glided noiselessly along the yielding surface of the reed-bordered expanse of water. It was quite a merry party that sat down to lunch at the Swan Inn at Horning, brightened by the presence of several lady friends, wives of members and others, and when the little trip was over there was probably not one of the company who shared in it who was not conscious of having had a delightful experience not easily to be forgotten.

Will it be considered ungracious to suggest the existence of a fly in the amber? It is disappointing that, notwithstanding the efforts made to render attractive these annual meetings of the Association, such a comparatively small number attend. Out of a total of 747 members on the roll, but 43 registered their names as present, scarcely the odd number over 700, or about 5 *per cent.* Possibly many members, particularly our northern colleagues, were reserving themselves for the impending, and more imposing, meeting of the British Medical Association at Aberdeen, with its opulent programme of both business and pleasure.

As attendance at medical meetings for many days in succession involves a good deal of mental strain, and convivial gatherings considerable stress of another sort, many, no doubt, did not feel inclined to face the double event. Still, it is regrettable that so meagre a proportion of members found it convenient to attend. As years pass on we must be prepared to miss one after the other of the "old familiar faces" of those who, for the past generation or more, have done their part in keeping alight the torch of scientific psychology, and who have helped to create and maintain the prestige of our Association. Surely we may hope that a legion of worthy successors will be found to follow worthily in the footsteps of the old brigade, to the inestimable benefit of those whose lives, and the lives of those to whom they are dear, are clouded over by one of the most distressing calamities which can afflict humanity.

The Advance of Psychiatry.

IN the *Revue de Psychiatrie* for November, 1913, there appears an article on Asylum Reform, by Dr. Toulouse, the Physician-Superintendent of the Ville-Juif, Seine, Asylum. Dr. Toulouse is well known for his persistent attempts to raise the level of asylum work in the Department of the Seine, and he has the conspicuous merit of saying, in plain words, which steps are essential to that process. His statement of that which remains to be done brings before us matters which are familiar to us in this country. His cries and pleadings are exactly those which our reformers have uttered, and are still uttering. In our own British fashion, we, if not altogether obsessed with pride when successful, are apt to be despondent, and to refer to the better manner in which things are managed in other countries. It is therefore somewhat reassuring to find that, in some of the essentials, our endeavours have carried us beyond the point at which the asylums of the Seine now stand. Certainly this is the case when these asylums, the admissions to which are drawn from the area where dwells the highest centre of life in France, are compared with those interserving the relative area in England.

Dr. Toulouse states as a cardinal fact that the cost, and the consequences attached to the consideration of cost, are dominated by one most powerful prejudice—that insanity is incurable. The chief interest of his article is to show the economic folly of such an assumption.

The actual cost of asylum administration in the Department of the Seine has increased 45 *per cent.* in the last ten years, while the population has only increased by 13 *per cent.* He points out that this increase of expenditure has been almost wholly devoted to the augmentation of the staff, and to improvement in their wages. But the staff accommodation is still below that which is considered proper for the ordinary workman, and their hours are still too long, especially having regard to their painful environment. But the cost of directly ameliorating the condition of the patient, either in material or therapeutic direction, has not generally increased. He tells of over-crowding and want of classification, which latter in its effect he terms barbarous, to be blushed for by generations to

come, and which eventually will be recognised as an important factor of costly chronicity.

The acute cases are mixed with the chronics, with the economic result that too much money is spent on the one class and too little on the other. Hygiene is bad from overcrowding, lighting is by gas instead of electricity, and the heating system inappropriate. The yards are small and viewless. There is no "parc" for exercise, and the means of amusement and occupation are nearly non-existent.

The therapeutic machinery is yet in embryo. Hydrotherapy, insolation, light, electricity, radiotherapy cannot be used in suitable conditions. There is no central laboratory for making biological researches.

Dr. Toulouse warns his authorities that the organisation of the asylum is far from having reached a point at which any reduction of expenses can be considered. He states plainly that, though the General Council is always favourable and generous towards progress, it has to consider the available resources, and undertakes other charges which appear to it to be more urgent. Dr. Toulouse considers it to be his strict duty to let the Council know how the asylums can be, and should be, administered. He thinks it necessary that it should not be allowed to think for a moment that any great economies can be practised without serious effects on the patients. Improvement and progress must cost money, and call for sacrifice. Comparison is made between the relative expenses of treating insanity in asylums and of treating disease in general hospitals; the public seem to think there is less justification for them in the former. The consciences of many are troubled with the doubt whether the sacrifices made for the asylums are of any avail, and it is such prejudice that must be fought.

Dr. Toulouse argues thus: Each patient costs £44 per annum, each discharge—recovered or improved—relieving the department of that liability, which may go on for twenty years or more in case of non-discharge. Any therapeutical improvement costing £400 will be covered if it aids in procuring the absence of ten patients for one year, or the absence of one patient for ten years. One must always bear in mind that patients are not put into asylums without any hope of discharge. It is difficult to prove the influence of

reforms on the discharge-rate, for the effect may not be immediate, and results must depend on the material submitted to treatment. Dr. Toulouse claims that in comparing asylums with general hospitals (where there is but little haggling over expenditure) it will be found that in the rate of recoveries there is probably not much difference. In both, acute cases get well—the maniac in the one, the typhoid in the other—but when we come to consider the chronics, he says that the results are heart-breaking in both cases. Does recovery arise in the ataxies, the brain-softenings, the spinal-sclerosis? What about the diseases of other organs—the heart, the liver, the kidneys, etc., which form the bulk of cases sent to hospital? Is confirmed tuberculosis or cancer cured at the hospital? We might suggest on our own part hysteria. Yet a patient costs daily 5 francs in a hospital, an old person 2 fr. 50 in a hospital, 3 fr. in an asylum, and only 1 fr. 50 in the asylum for chronic of Paris. The powers that be are always ready to spend more in fighting tubercle, cancer, and infectious diseases. Why then does the cost weigh more heavily on conscience in respect of the insane? Because sympathy is removed from them. The insane man no longer exists socially, while the others preserve always their influence and their power to exercise their rights, civil and political. But although certain physical maladies do not appear to yield many cures, nevertheless medical research is continuously supported in the hope that they will improve therapeutics. In insanity it is thought that on the one hand the chronic cases have acquired anatomical conditions which cannot be rectified, while, on the other hand, the causes are wrapped up in obscurity so as to defeat all medical analysis. Insanity, both chronic and acute, appears to them to call for relief, and not for the doctor.

Nothing can be more false than such an idea. Dr. Toulouse maintains that the anatomical disorder in simple psychoses is not generally profound. As an indirect proof he refers to spontaneous and rapid cures occurring in cases of quite old standing, which do not occur in tabes, organic heart-disease, etc. There are no decisive histological reasons which can of themselves make one think it impossible to arrest, or even cause regression in an anatomical lesion. We not infrequently see this phenomenon, and we cannot say why it occurs; that is all that can be said. Are the processes of cure, like the ætiolo-

gical processes, so obscure as to completely escape medical analysis and action? Nothing can be more inaccurate. Observation of acute cases, and more especially of convalescents who can express their impressions formed when ill, shows that the process is simple. All Dr. Toulouse's researches show that the confused type of acute insanity is a malady of fatigue, of physiological, and often of social, misery. It is an exhaustion which each one can recognise in himself in moments of over-jadedness. "Auto-conduction" is weakened, and thought, in the absence of direction, becomes automatic. The patients say that they are not masters of their own ideas, which work without ceasing, trouble sleep, drive them to acts and reasoning which they judge to be absurd. The power to arrest, coerce, direct them is failing, and effort is required to prevent the brain foundering. Rest, produced by medical means, is required, and may save the situation. He instances his own practice of the substitution of bromide for salt in the diet, and he has found the subcutaneous injection of oxygen to be very helpful. Rapid recovery and general improvement demonstrate that the physician can intervene successfully in acute psychopathy, so often produced by exhaustion or toxins. Professor Charles Richet, to whom Dr. Toulouse communicated his ideas of prolonging sleep, produced by non-toxic means, during several days, has suggested respiration in an hermetic chamber of carbonic acid, which appears to have little danger about it. Dr. Toulouse laments that the difficulties in providing his asylum with such a chamber have not yet been surmounted.

Taking the above as an instance of the physician's power to intervene, he maintains that if there is a department of disease in which such power can be used successfully it is that of insanity, and, further, he maintains that it is fair neither to the patients nor to scientific truth to regard the treatment of the insane as a sort of costly Utopia, in which it is unwise to encourage development.

Dr. Toulouse recites at some length the directions in which he has personally striven to produce reform, and he also sets out the lines on which such reform should be practised. With these we are already familiar from the work that has been proposed, thought out, and in many cases carried through in our own country. Dr. Toulouse, no doubt, approving the system of Alt Scherbitz, would have in the neighbourhood of

Paris an immense asylum-town for 5000, or even 10,000, patients.

He concludes his excellent paper with the contention that the asylum should not be a field for experiments in economies, but, on the contrary, that the physician there, as elsewhere, should have a free hand in procuring reform and improvement.

The line of argument adopted by Dr. Toulouse, with which we were not unacquainted, is undoubtedly a sound one. Every thoughtful man will concede that the effort to disarm insanity is worth a vast amount of expenditure on the part of a nation, while an increasing recognition of insanity as a disease requiring the utmost benevolence *per se* tends to increase the readiness to spend money on its treatment. Still, there is a prevailing obsession that the prospect of real amelioration is so slight that money so spent is so much waste. Thus we start with much reluctance to make a determined attempt at amelioration, and what is done is done more by way of satisfying obvious requirements, due to increasing benevolence, than for the purpose of experimental scientific progress. As psychiatrists we may well ask why insanity is left behind when so much forward endeavour is made in general medicine.

It is part of the tragedy of the war, which has been so ruthlessly thrust upon us, that it has come just at a time when it was hoped that some serious consideration might be paid to our pleas for psychiatric advance. It cannot be doubted that this and many other similar movements must be arrested during the period of national recuperation. But we feel confident that when wrong is subdued, and right prevails, a time of peaceful progress is in store for the nations of Europe. Until that time, however long, comes we may regard the Report of the Committee *re* Status of British Psychiatry as embodying views which will remain virile. Further, we may consider ourselves fortunate that this Report was finished and adopted just in time to escape the present disorganisation of the national life.

The War—Treatment of Alien Enemies in a Concentration Camp.

WE have received from Professor L. Brauer, Medical Director of the Eppendorf Hospital, Hamburg, an open letter

on the treatment of German Aliens at the Prisoners of War Camp, Newbury, also on the question of the war generally. It is signed by Professors Brauer, Dencke, Nocht, Rumpel, Simmonds, and Drs. Marben, Mann, and Æhrens.

The letter conveys nothing further than similar letters from German savants, published from time to time, have done, and there is nothing to be gained by its reproduction here.

Regarding Newbury Camp—now abolished—it is admitted that, at first, conditions were very crude, but the prisoners soon settled down and the happiest of relationships, considering the circumstances, were soon established.

We have had access, through the courtesy of the War Office, to the reports of the Commandant, Colonel Haines, and there is abundant testimony that the great majority of the prisoners were grateful for the considerate treatment they received, and have not hesitated both publicly and in private letters to express themselves so.

The majority of the charges made in the open letter are either untrue, exaggerated, or unfair. No allowance is made for the unpreparedness for the accommodation of large numbers of prisoners of war, and for the prevailing unfavourable weather, and we are satisfied that all was done that could be done to secure comfort under difficult and unexpected circumstances.

We congratulate Colonel Haines on his excellent management, of which there is such adequate testimony.

As regards the rest of the letter, we have complete confidence that when the time comes for the analytical and dispassionate consideration of all the circumstances that led up to the declaration of war, and the attitude and behaviour of the British people since, the signatories of the letter under review will have good reason to regret that they have allowed their better judgment and common-sense to be influenced by people whose implacable hatred of England is only equalled by their utter disregard for truth and right dealing, and whose noisy interference is rapidly driving a war waged in defence of principles, however irreconcilable, into a racial conflict which can only end in the extermination of one side or the other.

We are confident that we fight in a noble cause, and in our ability to succeed, and equally confident that our German colleagues, in the peace to come, will, after calm reflection, recognise that right was with us.

Part II.—Reviews.

Sixty-third Report of the Inspectors of Lunatics (Ireland), for the Year ending December 31st, 1913.

That the tide of lunacy in Ireland continues on the ebb is again an inference deducible from the statistical facts given by the Inspectors in their latest Report. When reviewing that of last year (1912) we drew this conclusion, quite a warrantable one, we believe, from an examination of the figures for the six most recent quinquennia, from which it appeared that the percentage rate of increase in the proportion of insane under care per 10,000 of population was, for each five-year period after the first, 18·4, 16·2, 17·7, 11·5 ⁽¹⁾, and 5·1 respectively. If we bring our calculations up to date, and compare a similar number of five-year periods terminating with 1913, the record is still more favourable, the corresponding ratios being 18·2, 17·0, 16·8, 9·7, and 4·8. Such figures carry an unmistakable meaning—the tendency of insanity in Ireland to increase is decidedly on the decline for the past ten years. This downward tendency is progressive, not fluctuating; and the fact that the actual increase in numbers in 1913 was 100 less than the average increase for the ten years preceding may be regarded as corroborative evidence.

As regards first admissions also, admittedly the real criterion of the increase of occurring insanity, computations of quinquennial averages of ratios to population show further improvement as compared with those available up to the close of 1912. The percentage increments in the proportion per 100,000 of estimated population for the first four of the five quinquennia ending with that year were 11·6, 9·2, 17·3, and 5·3 respectively, while in the last quinquennium there was an actual decrease of 1·4; for a similar series ending 1913 the percentage increases for the first four periods were 13·7, 8·5, 19·0, and 1·2, and in the last quinquennium a positive decrease of 4·4 *per cent.* In the face of these figures, it can hardly be maintained that the prospect of a term being at last reached in the progressive march of insanity in Ireland is other than reassuring, and there are substantial grounds for hopefulness as regards the future. This is the one salient fact disclosed by statistics, and deserves to be put in the forefront in any comments thereon.

The total number of insane under care on January 1st, 1914, was 25,009, showing an increase of 170 during the year, which was, as already stated, 100 less than the average increase for the last ten years, a significant fact in itself, the main increase having, of course, been in district asylums, which accounted for 156 of the total. There was an increase of 6 in private asylums, of 4 in Dundrum Criminal Asylum, of 1 in workhouses, and the balance of 3 were cases of single patients in unlicensed houses. Of the total under care 5 *per cent.* were in private asylums, 10 *per cent.* in workhouses, and 85 *per cent.* in district asylums.

The recovery rate in district asylums was 39·2 *per cent.* on admissions, which was well up to the average of a large number of years past. Table VII of Appendix B is a most useful one, as it gives the average

(1) Entered as 10·6 by error in last year's review.

percentage of recoveries and deaths extended over a series of years divided into five-year periods, so that it can be seen at a glance whether there is an increase or a decrease in the ratios recorded. And, perhaps, the most remarkable fact disclosed by this table is the practical uniformity of both recovery-rate and death-rate. During the past twenty years, great advances have been made in our knowledge of insanity, great advances also in the more scientific treatment of the malady, and in the many additional comforts and amenities which are now provided for the insane, influences which might be expected to react beneficially on the recipients, and tend to raise the recovery-rate generally. And yet the hard, unwelcome, shall we say (to psychiatrists) humiliating, fact remains that as regards the recovery of insane patients there cannot be said to be any improvement whatever. It continues to be practically identical with what it was twenty years ago. To find a satisfactory explanation of this circumstance is, no doubt, difficult, if not impossible. There is room, however, for suggestions, of which we venture to advance one, while fully conscious of its inadequacy. A number of cases of insanity—a minority, it is to be feared, and not a large one—do appear to completely recover, and never have a second attack. The larger number have a tendency to recur, and, after a certain number of recurrences, to become chronic and incurable; these form the bulk of our asylum population. It is probable that in the more favourable cases there is little or no hereditary tendency, whereas, in those which form the majority, heredity acts largely as a predisposing cause, and also as largely as a hindrance to ultimate complete recovery. Now, it is not unlikely that the relative proportion of these two classes of insane does not vary to any great extent in any age or generation. Nor can treatment, however scientific, be said to be of avail in preventing recurrence, and, in the end, chronicity. Treatment in the case of acute attacks has, we have reason to believe, very beneficial results, and aids to more speedy recovery; but its effect in the unfavourable class alluded to has no element of permanency, and the insanity will recur again and again in spite of any remedial measures employed. Like nature in the Horatian adage, you may drive it out with a pitchfork, but it is always bound to come back. Consequently, while restitution to the normal is probably greatly aided and expedited in cases of acute insanity by modern methods of treatment, the general recovery-rate, as revealed by statistics, has shown no improvement, nor is it likely to, until we succeed in discovering and applying the means not merely of cure, but of the prevention of insanity.

Insanity is a subject which can be regarded from multiple standpoints, and it is of advantage at times to concentrate attention upon some one of these, and deal with it more exhaustively than is usual. In their penultimate report the Inspectors discussed at some length the question of the relationship of the distribution of insanity to certain possible ætiological factors, such as density of population, pauperism, emigration, and alcoholism. The local distribution of insanity, and its progressive increase during the past fifty years, were given a prominent place in last year's report, and in that of this year the subject of age distribution, and its bearing on insanity, is more particularly investigated.

The report deals with the half-century 1861-1911. During these fifty years the population of Ireland fell from 5,798,967 to 4,390,219. This is attributed mainly to emigration, aided in recent years by a decreasing birth-rate. During this period the age-distribution has undergone a material change, the proportion of population under twenty years of age having fallen from 44·4 to 39·3 *per cent.*; while that at sixty-five and over has risen from 4·7 to 10 *per cent.*, the decrease in the ratio of the youthful portion of the population being thus almost identical with that of the increase of senility, while the ratio of persons aged twenty to sixty-four is practically the same in 1911 as it was in 1861. But from the fact that the proportion of persons aged forty-four to sixty-four increased from 16·9 *per cent.* in 1861 to 17·1 in 1901, while it fell to 15·4 *per cent.* in 1911, the conclusion is drawn that it is probable that a maximum of senility has been reached.

As regards the incidence of insanity at the several age-periods, we find from the census reports that the proportion of cases under twenty decreased during the fifty years under review from 15·6 to 4·8 *per cent.*, while that of senile cases (sixty-five and over) increased from 6·4 to 14 *per cent.* There was a slight increase in the ratio of cases between the ages of twenty and sixty-four, *viz.*, from 78 to 81·2 *per cent.* The chart giving these proportions in graphic form enables us to see these differences at a glance. And they are of great significance. In the case of the aged we must always expect a certain number to be the subjects of mental breakdown, and, although this is regrettable when it occurs, it is by no means as lamentable an event as a similar occurrence in the young. And it is a matter deserving of the highest congratulation that the incidence of insanity in the case of the younger members of the population has been so largely reduced. It is one of the most hopeful facts revealed in the recent records of insanity.

The proportion of insane and idiots per 1,000 of population, as given in Table C, also shows the same facts, although not, perhaps, in quite so striking a manner as regards the younger ages. The ratio of these (under twenty) per 1,000 is a merely fractional figure, but fell from 0·85 to 0·79 during the fifty years, while that of the senile cases (over sixty-five) rose from 3·3 to 9 per 1,000. The rate of increase in the ratio of cases of twenty-five to forty-four and forty-five to sixty-four was very different, that of the former class having risen from 3·7 to 8·4, and of the latter from 3·7 to 14·9 per 1,000, showing again the influence of senility.

The large increase in the number of senile persons in the population, which, as already mentioned, exactly corresponds with the decrease in the case of those of youthful age, is, no doubt, mainly due to emigration, and the increase in insanity is probably explicable, as the Inspectors suggest, on the grounds that this class "represents the senility of a period when the population of Ireland was much larger than at present." And, further, that as probably a large number of aged persons who have become insane during the past twenty years were alive during the famine years, when dire distress prevailed throughout the country, it is hardly to be doubted that such a time of stress and misery would be likely to have had a deleterious effect on the young people of that time, and, through maternal influences, even on those who were yet unborn.

And there seems no reason why we should not accept the Inspectors' surmise that "it seems probable that children born and partially reared amidst the horrors of the famine, and the epidemics of disease that followed it, were so handicapped in their nervous equipment as to be weak-minded from the start, or to fall victims to mental disease later." And we welcome the conclusion that "if this be so, there is hope that the insanity-rate may have reached its maximum rapidity of increase."

In the table on page xxvi we should like to see an extra column, giving the percentages of total mortality of the three causes of death—phthisis, general paralysis, and epilepsy—for five-year periods. This would add materially to its usefulness. In this table the records for four such periods, commencing with 1890, are given, and for four years ending with 1913. The present year will complete the fifth quinquennium, and would, therefore, be an appropriate starting-point for the additional item of information suggested.

The general tenor of the report is of a more cheering character than has yet been evident in any of those which have preceded it.

Nature and Nurture in Mental Development. By F. W. MOTT, M.D., F.R.S., F.R.C.P.Lond., LL.D.Edin. With 6 plates and 17 figures. Pp. 151. Crown 8vo. Price 3s. 6d. net. London: John Murray, 1914.

"This book is an expansion of the Chadwick Public Trust Lectures, delivered by Dr. Mott in 1913, in which the author expounded the subject of 'Mental Hygiene' in relation to the inborn characters of the child and its environment. The subject is first considered from the physiological and anatomical standpoint of the brain specialist and leads up to the explanation of the factors underlying the raw material of character and how this is influenced for good or bad by ancestral inheritance. The complexus of characters derived from species, race, sex, and ancestors is dealt with. A large practical experience has enabled the author to treat of the subjects of responsibility, crime, mental deficiency, and insanity, and how they are affected respectively by inborn and environmental conditions of social life. Lastly the author discusses the influence of nutrition and education in relation to the development of body and mind in their medical and social aspects. The subject is simplified to the lay reader by the reproduction of various illustrations, diagrams, and pedigree charts, which were used at the lectures."—(*Publisher's Announcement.*)

This work, in fact, conveys in shortened, but wonderfully complete, form the author's well-known scientific opinions and investigations, as far as they bear on the important sociological problem of the influence of nature and nurture in mental development. Information from other equally reliable sources is given, criticised, and adopted or rejected.

Its pages are full of sage counsel and condensed wisdom, and ought to be read widely, especially by those in a position to influence the future of the race. No better guide could be placed in the hands of school teachers, and others interested in education. It is written in language at once subdued, simple and weighty, conveying conviction to the mind of the reader that the author is one who can speak authoritatively on the subject.

The book opens with a short account of the progress of sanitary science. After commenting on the three stages, *viz.*, the growth of

industrialism, social reform, and the naturalisation of education, the author betrays a commendable optimism. He says :

"Each of these stages has supplemented and reinforced the other; yet we hear on all sides the pessimistic cry of the degeneration of the race set up by a few unthinking people who advocate a *laissez-faire*, or the so called 'better dead,' theory of all those who are unable, through inborn lack of vitality, to resist racial diseases. Are we to listen to these pessimists? No! Rather should we look with pride to what has been done in the last fifty years to better the conditions of the people."

Facts follow which support his contention.

The anatomical and physiological aspects of the brain and mind are sketched with a masterly hand. It is refreshing, in these days of verbosity and involved reasoning, to read such succinct passages as :

"All nervous action is reflex, and the simplest reflex act is the first term of a series, of which the most complex volition is the last." "Although the brain is the organ which stores the recollection of past experiences and the bonds that unite them, thereby enabling the individual to adapt himself to environment, yet, strictly speaking, the mind is directly dependent upon the vital activities and harmonious interactions of all the organs and tissues of the body; for of what use would the brain be without the peripheral sense organs and the nerves which connect them with the spinal cord and brain?"

Or,

"But another fundamental function of the brain besides perception of the external world and its surroundings is the consciousness of the individual's own personality, his appetites and desires, which are due in great part to the organic sensibility of the nerves of the body and internal organs, which without cessation are continually carrying messages to the brain, making us aware of our existence and our needs."

Again,

"It is the consciousness of feelings connected with the preservation of the individual and the preservation of the species which constitutes the fundamental biological source of all vital activity."

And,

"The mental states concerned with the consciousness of appetites and desires and the control of the instincts and habits associated with their gratification, the avoidance of pain and the obtaining of pleasure essential for the preservation of the life of the individual and reproduction are the mainspring of human activities, passions, and emotions."

As regards the biological basis of heredity, Dr. Mott quotes Lucretius and says :

"Of the broad principles of human heredity we know very little more than this ancient philosopher—science, aided by the microscope, has taught us much concerning the material basis of inheritance; it has shown that plants and animals are reproduced on the same common plan of a dual inheritance from the male and female germs."

Discussing the much-debated question of the transmission of acquired characters our author thus expresses himself :

"The majority of biologists deny the possibility of the transmission of an acquired character, and I would agree up to a certain point that there is no evidence or proof that an acquired character can be transmitted. That a father who drinks heavily and sees his wife and family starving transmits the *desire* to drink in his offspring is illogical and unproven; but he may transmit that inborn character which will lead to his offspring drinking, *viz.*, lack of moral sense and

feeble will." "If the devitalising agency caused by a poisoned condition of the blood is carried on in several successive generations, and especially if reinforced by a similar loss of specific energy in the female germ from similar and other causes, weakly types of offspring will be produced, etc."

Dealing with the question of the sources of degeneracy, and the effect of the interference of medical science, legislation, etc., with natural selection and the survival of the fittest, Dr. Mott describes how weakly types are cut off early by invading microbes and the antedating of heritable disease, and how essential a healthy bio-chemistry is to a healthy mind. The remedy to degeneracy is clearly put :

"Now, a healthy mind can only exist in a healthy body, and the proper storage of mind energy; its liberation, as well as recuperation (all necessary for a well-balanced mind), are largely dependent upon an inherited good and virile constitution; whereas the higher functions of the mind on the side of feeling, *vis.*, imagination and the affective nature, are specifically inherited, and more dependent upon inborn variation from the normal average mind."

The problems of heredity in relation to character, genius, and crime, the weeding out of poor types, the neuropathic inheritance are more fully discussed in later sections, and illustrated by many interesting pedigrees.

Regarding genius, which so often occurs in neuropathic family trees, and the loss the world would have sustained if the existence of these families had been prevented, Dr. Mott says :

"Still, if a nation, in order to progress, must have an admixture of mental instability in the form of imaginative genius and insanity, a thin streak of it is sufficient; for that nation will be the most virile which can breed from the greatest number of individuals endowed with the attributes of civic worth, courage, honesty, and common-sense."

Another striking paragraph is :

"An unsound stock may have successful men in the eyes of the world, but these may really form the first step in the process of degeneration; for the avarice and moral guile which made them 'pillars of society' may come out in the next generation as gross criminality or insanity."

How true this is we all know. Sections devoted to sex in relation to character, crime, and insanity form interesting reading. Dr. Mott is no advocate of the suppression of the legitimate exercise of the sexual functions in either sex. Would that his healthy words could reach the all too numerous and narrow minded crowd of worthies to whom the sexual aspect of life is anathema.

With regard to racial inheritance and crime, Dr. Mott has little sympathy with the teachings of Lombroso :

"But Calibans are not common; and Lombroso's inborn types are limited to a small group of markedly degenerate criminals closely approaching the feeble-minded."

Having thus, as it were, dealt with the origin of the racial unit, our author devotes himself to the more practical side of the question, and succeeding sections are devoted to such all-important matters as nutrition in mental development, the health of the mother in relation to the child, parental disease, infant feeding, education, stimulus in relation to development of the brain, sleep, the health of the teacher, etc.

It is impossible to deal with all these aspects of the subject in a

limited review. Two points may, however, be mentioned. Dr. Mott very rightly thinks that the medical inspection of the teachers is only second in importance to the medical inspection of the children. He urges the necessity of adequate remuneration, and the limitation of hours of labour, to enable teachers to enjoy normal, restful, and recreative, personal and social life. He points out that the ill-paid, and therefore ill-nourished, worried, tired drudge can have no *joie de vivre* to reflect to the child. His words should sink deep into the minds of some county authorities.

He speaks strongly on the much-debated question of sex and education :

"Without instruction, youths and maidens may grope their way to knowledge in semi-darkness under dangerous social conditions, against which they ought to be forewarned by instruction."

He thinks that suitable information on sex matters should be imparted to boys and girls just before leaving school by men and women especially chosen on account of their knowledge, wisdom, and high moral character. He adds that it might be well to invite parents to be present at these lectures. We, on our part, think so too on other grounds, for the remarkable ignorance of many parents is scarcely removed from that of the children, and the moral and material atmosphere of many a home would be sweetened and rendered more wholesome by a little sound sex education of the parents.

As an appendix is an important report by Miss Agnes Mott on the medical inspection of school children, for which she is to be much commended.

Part III.—Epitome of Current Literature.

1. Physiological Psychology.

The History of the Psycho-analytic Movement. [Zur Geschichte der Psychoanalytischen Bewegung]. (Jahrb. d. Psychoanaly., 1914.) Freud, S.

In the psycho-analytic movement history has been made rapidly, and amid the various revolutionary currents it must be difficult even for the prime leader himself to know exactly where the movement stands. In this characteristic and interesting paper, he seeks to show where he himself stands. He imparts an autobiographical value to the narrative by carrying it back to the days of his early medical life in Paris. He had become a doctor unwillingly, but was anxious to benefit neurotic patients, and thought that this could be done by the exclusively physical methods of electro-therapy.

The doctrine of suppression and resistance was one of the first elements of psycho-analysis to become clear to Freud, and he regarded it as an original discovery until he found it set forth by Schopenhauer ; "it is the foundation stone on which the edifice of psycho-analysis rests." That theory, he declares, is an attempt to make intelligible two man:

festations always found when we seek to trace neurotic symptoms to their source : the fact of transference and that of resistance. "All investigation which recognises these two facts, and makes them the point of departure is psycho-analysis, even when it leads to other results than mine." He strongly objects, at the same time, to suppression and resistance being termed "assumptions of psycho-analysis"; they are results.

The doctrine of infantile sexuality was a somewhat later acquisition. It had turned out that the events, to which the hysterical symptoms were traced back, were imaginary scenes in many cases. It soon became clear that these scenes had been imagined in order to conceal the autoerotic activity of early childhood, and behind these imaginations the sexual life of the child becomes revealed in all its extent. Herewith inborn constitution came into its rights; predisposition and experience were woven into one inseparable ætiologic unity, each element being ineffective without the other, and the child's sexual constitution provoking events of an equally special kind. Freud can understand that other views of the sexual impulse in relation to childhood may be put forward, like those of C. G. Jung, but regards them as capricious, formed with too great a regard for considerations that lie outside the subject, and so remaining inadequate.

Freud states that he found out the symbolism of dreams for himself ("I have always held fast to the custom of studying things before I looked into books"), and only afterwards found out that Scherner had in some degree preceded him, while later he extended his view under the influence of "the at first so estimable, and afterwards wholly abandoned, Stekel." He adds: "The most peculiar and significant fragment of my dream-theory is the reduction of the dream-representation to inner conflict, a kind of intimate insincerity," and this idea he has also found in the writings of J. Popper. As is known, Freud attaches immense importance to his doctrine of dream interpretation, and he remarks that he is accustomed to measure the competence of a psychological investigator by his relation to this problem.

At first Freud failed to realise what the attitude of the world would be towards his doctrines; he thought they were merely contributions to science, like any others. By the atmosphere of cold emptiness speedily raised around him he was soon made to feel that medical communications introducing sexuality as an ætiological factor were not as other medical communications. He found that he had become one of those who, in the poet's words, "disturb the world's sleep."

A considerable part of this lengthy paper is a criticism of Jung and of Adler, too full of matter to be easily condensed. He is not inclined to rate highly Jung's conception of the "complex," as involving no psychological theory in itself, nor yet capable of natural insertion into the psycho-analytic theory. Moreover, no word has been so much abused, and it is frequently employed when it would be more correct to use "suppression" or "resistance."

Of Adler, Freud speaks with respect as "a significant investigator, more especially endowed for speculation," whose studies of the psychic bearing of organic defect are valuable, and whom he had placed in a position of high responsibility in the psycho-analytic movement. But that

theory was never meant to be "a complete theory of the human psychic life," but only to enlarge or correct what experience had otherwise gained. Adler goes far beyond this, and attempts to apply to the whole character and behaviour of mankind the key intended for its neurotic and psychotic perversions. Freud admits that "Adler's efforts for a place in the sun" have had their good results, but his "individual psychology" is now outside, and even hostile to, psycho-analysis. Freud proceeds to criticise forcibly the extreme emphasis which Adler places on "masculine protest" and on the impulse of aggression. "He leaves no place for love. One may wonder that so sad a view of the world has found any recognition; but we must remember that humanity, oppressed by the yoke of its sexual needs, will accept anything if only it is offered with the bait of a conquest over sexuality." Freud is, however, much more favourable to Adler than to Jung. Adler's doctrine he regards as, indeed, radically false, but he possesses significance and coherence. Jung's modifications of psycho-analysis, on the other hand, are confused and obscure; he has changed the handle of the psycho-analytic instrument, and also put in a new blade, so that it is no longer entitled to bear the same mark.

Freud observes of his paper that it will cause glee to many to find the psycho-analysts rending each other. But similar differences and difficulties, he points out, occur in all scientific movements. "Perhaps they are usually more carefully concealed; psycho-analysis, which has destroyed so many conventional ideals, is in this matter also more sincere."

HAVELOCK ELLIS.

An Experimental Study of Stuttering. (*Amer. Journ. Psychol.*, April, 1914.) Fletcher, J. M.

Although stuttering has been known to medicine, the author remarks, since the days of the ancient Egyptians, there is still no consensus of opinion as to its nature. He attempts in this fairly elaborate study to approach it from the standpoint of psychological laboratory methods, and to offer a psychological interpretation, though not of the same kind as that put forward by the Freudians, which he opposes. In setting forth his interpretation he admits the probability that a favouring neuropathic diathesis is present in the stutterer.

The motor manifestations of stuttering are found to consist of asynergies in the functioning of the three musculatures of speech—breathing, vocalisation, and articulation. With these are involved motor anomalies, tonic and clonic, of other muscles, and tending to become stereotyped. It is especially in the accessory movements that stutterers differ widely. Besides the motor manifestations, there are disturbances of pulse-rate, blood distribution, and psycho-galvanic variation, varying approximately in intensity with the intensity of the stuttering. The essential condition is a complex state of mind, to be classed generically as a state of feeling in the wider sense. It is quality of feeling, however, rather than intensity, which governs the defect. In over 50 *per cent.* of cases speaking in public caused disappearance of stuttering. Feelings of inhibition or depression (fear, anxiety, shame, embarrassment) are those most likely to precede stuttering. The quality of mental imagery, attention, and association also seem influential. The emotional con-

comitant, much more than the nature of the sounds, determines the rise of stuttering. It is, therefore, "essentially a mental phenomenon in the sense that it is due to and dependent upon certain variations in mental state." A lengthy bibliography is appended, with numerous plates of tracings.
HAVELOCK ELLIS.

The Telealgesic Hallucination [L'Hallucination Téléalgésique]. (L'Encéphale, May, 1914.) Courbon.

The painful sensation following on the perception of a gesture executed by another person, and localised in the part of the body towards which that gesture was directed, is a phenomenon which may take on various forms. Its explanation depends on the probability that there is a special neuro-cerebral apparatus for the exercise of the function of the differentiated form of sensation which we term "pain" —the algesic function. Hallucinations of pain have for a long time been described. Courbon believes that he is the first to describe painful hallucinations, provoked by another person, and varying in locality, at the will of that other person. The case he presents is that of an ignorant and unintelligent servant, a woman, æt. 59. Since the age of thirty she had suffered from shifting pains, which various doctors had diagnosed as due to a disordered stomach. At the age of fifty the pains began to be accompanied by a vague fear. A few years later she began to think that her pains and her fears had a cause; people wished her ill, and wanted to kill her. At night she seemed to see men with knives, no doubt the people who were inflicting the pains upon her. This vaguely systematised idea of persecution led to her removal to the asylum. Here it was found that any gesture of a bystander accidentally directed towards her, or even ordinary movements of a bystander, such as blowing the nose, led to pains in the corresponding parts of the patient's body; she regarded all such movements as intended to injure her. The condition remained unchanged when the patient, who had been voluntarily placed in the asylum, was taken away eighteen months later.

These are genuine hallucinations, Courbon concludes, though of a special kind. They belong to the category termed by Kahlbaum "reflex hallucinations," and by Régis "transposed hallucinations." In a slight and normal degree sensitive persons have similar experiences at the theatre. In this extreme and morbid form the hallucination is the apparent realisation of the subject of the malevolent intention attributed to the other person's gesture. It is the transformation into sensation of a false idea. It is, therefore, a hallucination determined by a delusional interpretation.
HAVELOCK ELLIS.

Factors in the Physiology of Euphoria. (Psychol. Rev., May, 1914.) Dearborn, J. V. N.

The experience of satisfaction or pleasantness, called euphoria, is regarded, following Herbert Spencer, Marshall, and others, as due to the ample, unimpeded, and expanding nervous impulses received from large nervous fields. The author considers it is possible to be more explicit regarding some of these fields. He deals mainly with physio-

logical euphoria, not with ideational euphoria, or that pathological form found in insanity.

The factors he takes into consideration are (1) nutritional and sympathetic influences from the active intestinal villi, probably adapting the blood's content of lipoids and protein to the varying immediate needs of the nerve-cells; (2) kinesthesia proper, that is, the tonus and active contraction of the voluntary musculature (including articular, osseous, etc., fields) contributing to the dynamic reservoir of the central nervous system, or cerebral neurokinesis; (3) epicritic or dermal impulses, of great importance and including many complex mechanisms in the skin and mucosæ. Physiologic euphoria is thus determined by simple neurokinesis, and such neurokinesis is the condition for the high sthenia necessary to actuate or inhibit vigorously the motor paths.

HAVELOCK ELLIS.

The Reaction of the Circulation to Psychic Processes [Ueber die Normale und Pathologische Reaktion des Blutkreislaufs auf psychische Vorgänge]. (Neurolog. Centralbl., Jan. 16th, 1914.) Bickel, H.

Bickel has made about a thousand observations on nearly eighty persons, in health and in disease (psychoses and neuroses), in order to ascertain the behaviour of the blood pressure on the plethysmographic volume-curve under psychic stimulation, especially mental work, intellectual pleasure and displeasure, sensory satisfaction and dissatisfaction, and attention. For the continuous observation of the oscillations of blood pressure he used Uskoff's sphygmo-tonograph.

The blood pressure, whenever changed at all, was found, alike under normal and pathological conditions, to be increased by these stimuli, especially attention and pleasurable excitation. This increased pressure could not be due to increased arterial tone alone, but also indicated increased cardiac activity. The volume-curve (as other investigators have previously found) behaved differently under normal and under pathological conditions. In normal subjects (except for pleasurable stimuli) the volume of the arm and ear sank, that of the brain and abdomen rose; the blood would appear, with rise of the general pressure, to be transferred from the exterior to the interior of the body. In the pathological subjects, on the other hand, the normal vaso-constrictor innervation from the cortex to the exterior parts of the body is partly or entirely broken; instead of decrease of volume at the surface, there is, especially with mental work, increase. The abdominal phenomena are less clear, as the passive distension due to increased pressure is counteracted by an antagonistic narrowing due to greater expansion at the surface.

HAVELOCK ELLIS.

Cœnesthopathia [Les Cœnesthopathies]. (L'Encéphale, May, 1914.) Austregesilo and Espasel.

As cœnesthesia stands for the consciousness of the physical self, so cœnesthopathia is the corresponding psycho-neurotic syndrome, representing morbid perversion of that consciousness. Normally, the message from body to brain attracts little attention; in neurotic and psychotic conditions generally these sensations become more or less

prominent and tinged with anxiety, but not usually to a degree constituting cœnesthopathia. This is only reached when the symptoms generally are found to revolve round the cœnesthesia.

The authors accept the division of troubles of cœnesthesia into (1) *hypercœnesthesia*, or feeling of exaggerated typical well-being common in general paralysis and sometimes in mania; (2) *hypocœnesthesia*; and (3) *acœnesthesia*, the diminution or abolition of euphoria found in hypochondriasis and sometimes in melancholia; (4) *paracœnesthesia*, the most frequent and variable group because it includes all the transformations of physical personality, zoopathias, demonpathias, etc., as found in alcoholism, dementia præcox, etc.

Cœnesthopathic changes have great symptomatic importance, as they sometimes play the chief part in a neurosis or psychosis, although they may also constitute an isolated syndrome. The latter part they most frequently play in women, especially from puberty to the menopause, when they become enormously frequent. They also become exaggerated at the menstrual period.

Cœnesthopathic troubles are more often found in great cities than in the country, and some races, like the Latin and Jewish, are specially liable to them. Chronic infections and intoxications in general, hereditary taints and over-strain, favour their appearance.

The cœnesthopathias are mostly cephalic and, especially, abdominal. They constitute the basis on which other pathological manifestations of emotional, ideational, or motor order rest. Formerly the patients were regarded as neurasthenic, hysterical, obsessional, or hypochondriacal, and this indicates the task of differential diagnosis. On the psychiatric side it is necessary to eliminate chronic hallucinatory conditions. We are concerned with patients of tainted heredity, and constitutional lack of balance; the sensibility is abnormal, but there are no delusions.

Seven cases are presented. The treatment chiefly relied on is psycho-therapeutical, and must sometimes be patiently prolonged.

HAVELOCK ELLIS.

Hypnotism. (Dub. Journ. Med. Sci., April, 1914.) Smyly, Cecil P.

In the most ancient times it was known that the phenomena now called hypnotism could be produced, and also what conditions were most favourable for their production.

Both in Egypt and in Greece the priests, who in those days were also physicians, were skilled in the art of suggestion as applied not only to the treatment of disease, but also to the production of so-called miracles; in Asia, especially India, hypnotism has been known and practised since time immemorial, and is still in common use; in less civilised communities the witch-doctor and faith-healer owe most of their success to similar practices.

On the basis of astrology, which taught the influence of the stars on the minds and actions of men, Paracelsus, about the year 1530, founded the theory that men could influence one another, and especially those who were sick.

In 1665, a Scotchman called Maxwell produced a regular system of magnetic healing. He taught that there was a universal *spiritus vitalis* which pervaded and acted on all living bodies, in a manner

similar to the magnetic fluid of Mesmer. He also believed that all animal bodies emitted rays which possessed living properties acting on neighbouring bodies. Even the excrements retained these properties, and were useful in treatment. A relic of this may, perhaps, be traced in the employment in some places of animals' droppings, or human saliva as a dressing for wounds. It was not until more than a century later that the science of animal magnetism attracted any general attention.

In 1766, Anton Mesmer took his M.D. degree in the University of Vienna, the subject of his thesis being "The Influence of the Planets on the Human Body." Six years later he began to study the properties of the magnet with Father Hell, the Professor of Astronomy. The latter had invented steel plates of a peculiar form which he magnetised and applied to the cure of disease, with, it is said, extraordinary success. Mesmer had his own ideas about the power of the magnet, and used his friend's plates to test them, with miraculous results. Father Hell attributed the whole success to his plates, and described Mesmer as merely a physician whom he had employed to carry out his experiments. The controversy which followed resulted in Mesmer having to leave Vienna. He continued to produce cures, but instead of using Hell's plates he employed what he called animal magnetism.

In 1778, he arrived in Paris. Among the thousands who flocked to him was a Dr. D'Eslon, who became his pupil, and practised with such success that Mesmer complained bitterly that the rewards of his deep study and life-long labours were snatched from him by a mere empiric. Through the influence of Queen Marie Antoinette, Mesmer was offered a large pension if he would submit his system to the examination of a Royal Commission. The Commission was appointed, but Mesmer removed to Spa, leaving the Commissioners to sit on D'Eslon, which they did gently but firmly. The object of their investigations was to prove the existence of animal magnetism, and its utility in the cure of disease. Mesmer described his discovery as "a fluid universally diffused; it is the medium of a mutual influence between the heavenly bodies, the earth, and animate bodies; it is extended so that there is no vacuum; it is capable of receiving, propagating, communicating all the impressions of movement; the animal body feels the effect of this agent, and it is by insinuating itself into the substance of the nerves that it directly affects them. The action and virtue of animal magnetism may be communicated from one body to other bodies animate and inanimate; this action is exerted at a considerable distance without the help of any intermediate body." He also laid down that "there is only one Nature, one disease, one remedy, and that remedy is animal magnetism." This dogma is, perhaps, rather more credible than the modern one, that neither matter nor disease exists, but that a certain method of treatment will cure the former when affected by the latter.

Shortly after this Chas'enet de Puysegur, in 1874, discovered the condition called artificial somnambulism, the chief characteristic of which was a condition of sleep in which the magnetiser was able to direct the ideas and actions of the magnetised.

At the end of the eighteenth and the beginning of the nineteenth century, an American called Perkins invented, and of course patented, "two instruments, one having the appearance of steel, the other of

brass; the ends were brought to a point, and were applied to the patient by drawing the points in a downward direction over the afflicted parts for twenty minutes." These were the once famous metallic tractors. In 1804, his son established the Perkinian Institute in London, under the presidency of Lord Rivers. Dr. Haygarth, of Bath, however, found the same good results were obtained by using tractors made of lead, wood, or even a nail covered with sealing-wax.

In 1837, John Elliotson began to mesmerise patients at University College Hospital, with the result that he was compelled to resign his appointments. In 1843, he and his friends started a paper called the *Zoist*, through the influence of which mesmeric infirmaries were opened in London, Edinburgh, and elsewhere. In Exeter, Mr. Parker, a surgeon, performed 200 painless surgical operations on mesmerised patients. Among the cases reported in the *Zoist* were amputations of the thigh, leg, arm, breast, etc., in addition to the cure of numerous diseases.

In 1845, James Esdaile, having read of Elliotson's successes, began to employ mesmerism in India, and, in 1846, was placed in charge of a hospital in Calcutta in order to continue his mesmeric operations. Most of his cases were elephantiasis of the scrotum, the removal of which entailed a mortality of 50 *per cent.*, but in 161 consecutive cases operated on by Esdaile the mortality was only 5 *per cent.*

The discovery of hypnotism, as distinguished from mesmerism, is due to James Braid, a Scotch surgeon who settled in Manchester. In 1841, after witnessing a mesmeric *séance*, he determined to try and discover the cause of the phenomena which had been produced. After a number of experiments, he became convinced that the phenomena were purely subjective, and not due to any mysterious force or fluid; and from that time till his death, in 1860, he employed suggestion with success in his practice.

After the death of Braid, the practice of hypnotism practically came to an end in England, but in France Dr. Liébault discovered, in 1860, that by suggestion he could induce a condition which he called *sommeil provoqué*. He soon gave up ordinary practice, and in 1864 settled at Nancy and gave himself up to hypnotic work. For twenty years he devoted himself to the poor, and refused to accept a fee lest he should be considered guilty of unprofessional conduct. It was not until 1882 that he met with anything but contempt and ridicule; in that year he cured a patient who had been treated by Prof. Bernheim for sciatica for six months without relief. The Professor visited Liébault, and though at first sceptical, soon became an eager pupil, and in 1884 published his great work on suggestion. From that date Liébault became well known, and doctors flocked to Nancy to study the new method of treatment.

While Liébault was being ignored or laughed at in Nancy, Charcot established a school of mesmerism at the Hospital of La Salpêtrière in Paris. For some time there was keen rivalry between the two schools, but Charcot's views are now generally discredited, while those of Liébault have spread over the whole of Europe. In England, the hypnotic revival, though the way was prepared for it by Braid, arose chiefly through Liébault's influence, one of its leading exponents being Dr. Bramwell, of London.

To pass from the history to the nature of hypnotism. Hypnosis may be defined as a psychical condition in which suggestions are not only much more easily accepted, but are also realised with an intensity much greater than is possible in the normal state. The term hypnosis or hypnotism is rather deceptive, as sleep is only one of the many phenomena which can be produced, and is certainly not one of the commonest. The idea of sleep also suggests relaxation and unconsciousness, but in hypnosis not only is the mind in a peculiarly sensitive state of consciousness, but the body is capable of extraordinary muscular efforts.

In the lighter stages the memory is unaffected, though in the stage of somnambulism there is post-hypnotic amnesia—*i.e.* in normal life the patient remembers nothing of what took place under hypnosis. On being re-hypnotised, however, he will remember not only all that happened in previous hypnoses, but also the events of every-day life, many of which he perhaps thought he had forgotten.

Even in the lighter stages the special senses can be altered by suggestion, either with increase or decrease of their activity. A psychical dumbness, blindness, or deafness can be produced, and in deeper hypnosis analgesia and anæsthesia.

As to susceptibility, Schrenck Notzing states that out of 8,705 persons tried by fifteen different observers, 6 *per cent.* were uninfluenced, 15 *per cent.* became somnambulist, 79 *per cent.* were less deeply hypnotised. Liébault's failures amounted to only 3 *per cent.*, while, according to Forel, every mentally healthy person is naturally hypnotisable. Race and sex cause hardly any difference in susceptibility, but children over three are more easily influenced than adults.

It is often said that a person who is easily hypnotised must have a very weak mind, but all authorities are agreed that the hysterical and ill-balanced are the most difficult to influence, and that most lunatics and all imbeciles are quite incapable of being hypnotised at all.

The methods of inducing the hypnotic state are then described, also the conditions which tend to favour it.

No matter what method is used, the results depend chiefly on the suggestibility of the subject, and only in a minor degree on the operator, though obviously some men can enforce obedience to their suggestions better than others. If, however, the subject offers a real resistance, or if he has produced a condition of auto-hypnosis, it is almost, if not absolutely, impossible to induce even the lighter states of hypnosis.

The various conditions in which hypnotism has been used with success are so numerous that it is impossible to do more than mention a few, such as the different forms of hysteria, including perversions of sentiment, obsessions and irresistible impulses; functional neurosis of children; neurasthenia; dipsomania and drug habits; insomnia and epilepsy; menstrual disorders and constipation; seasickness and stammering.

Organic diseases, of course, cannot be cured, but many of their symptoms can be relieved.

For therapeutic purposes, as a general rule, only a light degree of hypnosis is necessary, and latterly Bramwell employs suggestion alone, without hypnotising his patients.

In surgery hypnotism has frequently been employed to procure anæsthesia, both before and since the invention of ether and chloroform.

Like all other anæsthetics it has its advantages and disadvantages. Once anæsthesia has been obtained it can be continued for any length of time, and can be re-induced by either the written or verbal command of the hypnotiser when required. Nervousness can be removed. No preparation is necessary; the process is absolutely safe and pleasant, and, of great importance in operations on the mouth and throat, there are no gags, tubes, or other apparatus to get in the way of the operator; there is no post-operative vomiting; pain after operation, and at subsequent dressings can be entirely prevented, and frequently the rapidity of healing is marked.

Numbers of cases of painless parturition during hypnosis have been reported, and certainly the uterine contractions can be modified by the action of the voluntary muscles. Pregnant women are more easily hypnotised than those suffering from nervous diseases, but, though over 90 *per cent.* of people can be hypnotised, it generally requires several preliminary attempts before a sufficient depth of hypnosis can be obtained, and so, until the methods of induction are greatly improved, the use of hypnotism as an anæsthetic must always be restricted.

Naturally, many attempts have been made to explain how the phenomena of hypnotism are produced.

Mesmer believed in a vital fluid or force which was transmitted from the operator to sensitive subjects, and which also existed in metals, crystals, and magnets.

According to Braid, everything was due to changes in the patient's own brain, one idea becoming dominant through the temporary inhibition of the other ideas which normally control it. Later, he came to the conclusion that the only explanation of the condition was the intelligent action of a secondary consciousness.

Charcot's views were simply those of the mesmerists, only that he terms the subjects hysterical instead of sensitive.

The Nancy school reproduces Braid's earlier and discarded theory of psychological inhibition, and attributes all the phenomena to suggestion.

The theory which, according to Bramwell, affords the best working hypothesis is that of the subliminal consciousness. It presupposes a secondary consciousness, capable of exerting powers over which we normally have little or no control; and certainly the phenomena of hypnotism all show increased, not diminished, mental power.

J. R. LORD.

2. Clinical Psychiatry.

A Comparison of the Wassermann Reaction among the Acute and the Chronic Insane. (Journ. Nerv. and Ment. Dis., Sept., 1914.)
Darling, J. A., and Newcomb, P. B.

By a routine application of the Wassermann test to the blood serum of all new admissions to the Warren State Hospital, very frequently the

attention was first directed to the luetic origin of various mental disturbances which presented at first glance the clinical features of other psychoses. This was especially true in numerous instances of paresis and cerebro-spinal syphilis simulating a manic attack, the disturbed delirium of dementia præcox, or the agitated confusion of an artero-sclerotic or senile psychosis. This innovation was extended to all the patients already resident. The technique adopted is then described. Eight hundred and forty-nine specimens of blood were obtained from those patients who had been admitted prior to such tests becoming a routine practice, with the result that 5.06 per cent. were positive. An examination of 452 admissions gave a positive result in 20.4 per cent. The obvious explanation is due to the brief and fatal termination of the cases of paresis and cerebro-spinal lues, which comprised 12.16 of the recent cases. In the remaining 8.18 per cent. syphilis was not held accountable for the psychosis. Of the cases already resident (849) only two were attributable to syphilis, leaving 4.94 per cent. with positive reactions in whom syphilis did not cause the psychosis. Thus, the prevalence of this disease in the chronic insane differs but little from its probable prevalence in the community at large. J. R. LORD.

Case of Ganzer's Symptom-Complex in a Military Prisoner [Syndrome de Ganzer chez un détenu militaire: contribution à l'étude des rapports de la simulation et de la démence précoce]. (Rev. de Psychiat., May, 1914.) Livet.

The case reported by Dr. Livet is chiefly of interest as bearing on the question of the simulation of insanity. The patient, a man, æt. 25, a soldier in the Foreign Legion, with a bad criminal history, was court-martialled for striking his superior officer, and, having acted in a very eccentric manner, was sent to the asylum for observation. The atypical character of his symptoms, and their sudden development under the threat of punishment, led to the diagnosis of malingering, but at the same time their very puerility and exaggeration appeared to indicate an underlying condition of debility. And the subsequent development of mannerisms, stereotypisms, slight catatonic manifestations, and emotional indifference, confirmed the opinion that the case was one of dementia præcox. Both in the early phase, in which the author considers that there was undoubtedly conscious simulation, and in the later stages of enfeeblement, the patient showed in a marked degree the symptom of irrelevance of reply (*Vorbeireden*), described by Ganzer in cases of hysterical dreamy state. Dr. Livet remarks that the occurrence of this symptom-complex of Ganzer is not infrequent at the beginning of dementia præcox in prisoners and soldiers, and that in such cases it is to be regarded as a pathological simulation. It tends to persist as a stereotypism marking the special conditions of the milieu in which the psychosis developed. The point is of practical importance, as the presence of this symptom, with its obvious suggestion of malingering, may lead the hasty observer to overlook the existence of the real disease beneath it

W. C. SULLIVAN.

A Contribution to the Study of Insanity in Twins. [Contributo allo studio della follia nei gemelli]. (Arch. di Anthropol. Crim., May-June, 1914.) Vidoni and Tanfani.

After a critical review of the literature of the subject, the authors give a short report of a case of male twins, æt. 33, both mentally defective, and one presenting in addition an imperfectly systematised delusional state, with symptoms of impulsivity, negativism, and verbigeration. The twin with the more active development of mental disorder had been exposed to two stresses which had not operated in the case of his brother; he had been called up for military service, and he had married. It was after some months of soldiering that the first symptoms of his dementia præcox appeared. The family history showed an exceptional degree of hereditary taint: the parents were first cousins, and insanity, mental debility, and alcoholism abounded in the stock; the first-born child in the family became insane, the second was eccentric and feeble-minded, and then seven abortions intervened before the birth of the twins.

Discussing the case in connection with the theoretical views which have been advanced as to the nosological position of *folie gemellaire*, the authors conclude that their case goes to show that the insanity of twins is to be regarded, not as a definite clinical group, but merely as a manifestation of mental degeneracy—it is a particular case of the insanity of invalid brain. They further remark that the development of dementia præcox in one of the twins in their observation points to the significance of innate defect as a condition precedent to the evolution of this disease. A somewhat inadequate bibliography is appended to the paper.

W. C. SULLIVAN.

Acute Alcoholic Delirium [Du délire alcoolique aigu]. (Bull. de la Soc. de Méd. Ment. de Belgique, February, 1914.) De Block.

This paper gives a cursory review of the clinical aspects of alcoholic delirium as observed in a series of 167 cases treated in the psychiatric clinic of the University of Liege. The ordinary form of alcoholic liquor consumed by the working classes of Liege is gin, while beer and wine are of quite secondary importance, and absinthe is only used to a negligible extent. The author suggests that local variations in the clinical features of delirium tremens may be in some measure attributable to difference in the sort of liquor drunk in the several regions, but it does not seem possible to detect in his cases any special characteristics that can be regarded as distinctive of gin alcoholism. On the whole, the hallucinations and delusions noted are singularly like those met with in cases of the disease occurring in urban populations under similar conditions as regards education and industry, whether the prevalent drink be wine, beer, whisky, or other form of spirits. The mortality in the series was fairly low—4·7 per cent., but it is difficult to compare this figure with the results of other observers, as no details are given regarding the age-distribution of the cases, their sexual incidence, and so forth. Of the seven patients who died, three had epileptiform convulsions, a fact which goes to confirm the view that this symptom is of bad prognostic import. Dr. De Block had observed a few cases of the type described by German writers (Bonhoeffer, Schroeder, Pilcz) as

acute alcoholic hallucinosis, in which there is a sudden development of auditory hallucinations with more or less systematised persecutory ideas, While admitting the reality of this condition as a clinical entity, Dr. De Block points out that the occurrence of cases intermediate in character show it to be essentially connected with ordinary delirium tremens. He does not refer to the possible influence of neurotic heredity in determining this special evolution of alcoholism.

W. C. SULLIVAN.

Epilepsy and Traumatism [Epilepsie et traumatisme]. (Bull. Soc. Clin. Méd. Ment., April, 1914.) Marie, A.

Marie shows a naval gunner, æt. 26, who met with an accident in 1906, causing a large wound over the left side of his scalp, followed almost immediately by epileptic fits. He recovered from these under bromide, but they left some mental impairment. He was no longer fit for the naval service, but was employed as a nurse in the hospital. While acting as nurse in 1907 he met with another accident, falling on his head; the fits again appeared with mental dulness. He recovered for some months, then had another seizure in Paris, where he was sent to an asylum. There he was dull, confused, and morbidly emotional, had marked motor signs, oculo-pupillary troubles, speech affected, slow and scanning as if he had something in his mouth; no dysarthria nor dysphasia; he could read, write, recognise and name objects seen and felt. No history or signs of syphilis or alcohol. The mental symptoms have almost disappeared, and the motor signs are much less evident. The writer suggests surgical interference as the scar on the scalp is so well defined, extending over the motor area of Broca. The chief interest in this case lies in the fact that a head injury was on two occasions followed by epilepsy with transient mental and motor symptoms.

E. MONTGOMERY.

The Paralytic Syndrome in a Diabetic; death from Acetonemic Coma (Syndrome paralytique chez une diabétique; mort par coma acétonémique terminal]. (Bull. Soc. Clin. Méd. Ment., June, 1914.) Marchand, L., and Petit, G.

Diabetes is rare as a cause of the paralytic syndrome. The few cases recorded lack pathological confirmation. The authors of this paper had under their care recently a woman in whom the paralytic syndrome developed some days prior to her death from diabetic coma, and in whom the *post-mortem* clearly showed that the condition was the result of auto-intoxication, and not of a diffuse meningo-encephalitis. The patient, a woman, æt. 60, had been for some years subject to attacks of depression, with threats of suicide, phobias, etc. The mental symptoms leading to certification only began a month before her admission to the asylum. She became confused, disorientated, and paraphasic, and was stated to have visual hallucinations. Her previous health had been good; there was no evidence of syphilis, and her diabetes was only diagnosed on admission to the asylum. Her friends had noted, however, that for some time she had been getting weaker, and suffered from increasing sleepiness. On admission she was quite disorientated in time and space, recent and distant memory much impaired, had difficulty in

naming objects, and could not make simple calculations. She was distinctly depressed, with hypochondriacal and melancholic ideas, and had no grandiose delusions. There was marked disturbance of articulation, especially with test words; her pupils were unequal, her reflexes exaggerated, and her tongue and extremities were tremulous. The breath had a strong odour of acetone, and her urine contained sugar. In a few days she passed into a state of diabetic coma, in which she died.

The *post-mortem* showed an intense congestion of the meninges, which were milky, and diffusely adherent to the cortex. No granulations in the fourth ventricle, and no dilatation of the lateral ventricles. No atheroma of the basal vessels. Portions of the motor cortex were examined, and showed the following changes: The pia is thickened, oedematous, adherent to the cortex in parts, and infiltrated with blood. There is no definite meningeal hæmorrhage, but the under surface of the pia exhibits many extravasated red blood-cells. There is no trace of vascular or other inflammation, and the vessels are much dilated. The cellular lesions are very marked, and differ entirely from those ordinarily found in intoxications. Not only are the chromophil elements intact, but they show an unusual affinity for the stain. The cell bodies are slightly atrophied, and contain areas of pigmentation; the nuclei are deformed, oval, and excentric; there is no increase in the number of satellite cells; no lesions in the vessels or the neuroglia. The tangential fibres are reduced in number in the frontal lobes. Similar cell changes are present in the cerebellum and bulb.

We have here, then, a paralytic syndrome undoubtedly toxic in origin, and comparable with that resulting from alcoholism. The diffuse meningeal hæmorrhages may be looked on as a true purpura of the pia mater.

W. STARKEY.

3. Treatment of Insanity.

The Treatment of General Paralysis by Trephining and Intra-meningeal Injections of Spirillicides. [*Ponctions cérébrales et Instillations spirillicides intraméningées dans la P.G.*]. (*Bull. Soc. Clin. Med. Ment.*, Feb., 1914.) *Marie and Levaditi.*

Levaditi and Mutermilch have shown in 1911 that the serum of animals injected intra-peritoneally with salvarsan had strong microbicidal powers *in vitro*, and that these powers persisted after the serum had been subjected to a temperature of 55° C.

The authors of the paper under review give the results of an attempt to treat general paralysis by injecting the serum of salvarsanised rabbits intra-meningeally. The animal is injected with salvarsan intra-venously, the dose employed being in the proportion of 0.07 grm. to the kilogram of body weight. Violent shock results, but recovery soon occurs. One hour later it is bled to death, and the serum is decanted and subjected to a temperature of 55° C. for forty-five minutes; it is then ready for use.

Two cases of general paralysis were treated in the following manner: The skull was opened under chloroform anæsthesia by a de Martel

trepine, the site being the anterior temporal region on each side. The dose employed was 5 c.c. on each side, and it was introduced by means of a bent needle, directed at first forwards, then towards the parietal region under the dura. The serum was injected slowly and steadily, and the openings in the skull closed. In both cases there was a severe reaction within a few hours—high fever, vomiting, prostration, partial convulsions, and later a catatonic condition. These symptoms persisted for three or four days, and then passed off, leaving the patients distinctly improved both mentally and physically. The improvement was most marked in the earlier case. Since then the authors have treated ten more cases in the same manner, without any bad result, and with marked benefit in all. It is too early to say if the improvement is permanent, but the treatment seems to hold out some hope at least, and is worth an extended trial. It is important in operating to avoid puncturing the brain substance, lest the injected fluid should destroy any of the motor areas, and the trephine opening should not be made in the temporal fossa, lest the larger epicranial vessels, or branches of the middle meningeal, be injured.

W. STARKEY.

The Use of Neo-salvarsan in Mental Deficiency. (Glas. Med. Journ., Oct., 1914.) Findlay, L.

Before the introduction of the Wassermann test, some authors, e.g., Ziehen, had found evidence of syphilis in as many as 17 *per cent.* of the cases, but Shuttleworth, on the other hand, concluded that only 1 *per cent.* of cases of idiocy were due to this malady. With the help of this test Fraser and Watson found evidence of lues in 60 *per cent.* of 205 mentally defective and epileptic children, and Robertson and the author, working with the same technique, obtained a positive Wassermann reaction in 59 *per cent.* of fifteen mentally defective children. Dean concluded that at least 15 *per cent.* of cases of idiocy were due to syphilis, and Krober puts the figure at 21 *per cent.*

The highest percentages which have been obtained by workers in the West of Scotland using the Browning, Cruikshank, and M'Kenzie method, have caused some authorities to question the diagnostic value of the test. In the absence of both a history of lues and specific stigmata, his opinion was confirmed that the *Spirochaeta pallida* is a frequent cause of idiocy, and also that salvarsan is exceedingly efficacious in the treatment of syphilitic manifestations, by the following experience in the treatment of mental deficiency.

CASE I.—E. H—, female, æt. 8, one of a family of five, all of whom are living. First seen November 14th, 1912. Father and mother alive and well. The other children are normal, and there is no specific history in the family.

Patient began to walk at fifteen months, and to talk at eighteen months, but she has never talked well. Teething commenced at eighteen months; the upper incisors have never appeared. She was always a backward child, has never been to school, and is subject to nervous attacks, during which shaking of the hands and feet occurs. She would never associate with other children, could not be sent messages, was not able to dress herself, and frequently soiled her clothes. Shortly before

coming under observation she had been looked upon as a cretin, and was treated with thyroid gland without any benefit.

She is pale, nervous, mentally deficient to an extreme degree, and undersized. There are no specific stigmata.

Patient, her mother, and four brothers and sisters all give a positive Wassermann reaction.

She was treated with potass. iodid. and hydrarg. perchlor. for four months, but with no improvement. Between April 8th, 1913, and May 12th, 1913, she received in addition four intra-muscular injections of neo-salvarsan in doses varying between 0.4 and 0.6 grm., in all 1.8 grm. By the conclusion of the series of injections she had distinctly improved, and was brighter mentally, but the pain and induration consequent on the treatment had been so severe that it was decided to administer the drug intravenously. From May 19th to June 2nd, 1913, she received three intravenous injections in doses varying between 0.3 and 0.4 grm. at weekly intervals, *i.e.*, in all 1.05 grm. The child by this time had still further improved; she was brighter, was beginning to play with other children, and could be trusted to go messages. From September 9th till September 23rd, 1913, she received other four intravenous injections, the doses varying between 0.35 and 0.25 grm. These last four injections were administered under an anæsthetic, as the child had hitherto been very much afraid at the time of the operation. In all, she received 4 grm. of neo-salvarsan.

At the termination of the salvarsan therapy she was greatly improved.

The child was last seen on June 9th, 1914, when the Wassermann and luetin reactions were definitely negative. She had not received any mercury since November, 1913. The improvement in both her mental and physical states has continued.

CASE 2.—W. G.—, male, æt. 8½. First seen on May 9th, 1913, on account of not making progress at school, which he had attended for three years. He is one of a family of three, the rest of which are healthy and intelligent. There is no specific history in the family (father is a soldier), nor of mental disease, nor of consanguinity.

Patient never goes out to play with other boys, nor can he defend himself against them. He cannot go messages, nor make the slightest attempt at reading, and is only able to recognise pictures of very few common objects.

He is moderately well-developed physically, has a somewhat small head, and a dull apathetic expression. There are no specific stigmata. Wassermann reaction is definitely positive. From May 16th till June 23rd, 1913, *i.e.*, during a period of five and a half weeks, he received five intramuscular injections of neo-salvarsan in doses varying between 0.3 and 0.45 grm., in all 1.9 grm. At the same time he was given potass. iodid. and hydrarg. perchlor. per os.

After four injections his mother stated that he was distinctly brighter, and for the first time cried on entering the dispensary, apparently recognising that he was going to receive an injection, which always caused considerable pain. He could now go messages, and was able to read such small words as "cat" and "dog," which he could not do previously. Four months after the last injection he had been put into

a higher class at school, and was playing with other boys, but still allowed them to "knock him about." Six months after the last injection the Wassermann action was still positive, but weak. Potass. iodid. and hydrarg. perchlor. were being still continued.

Seen on April 25th, 1914, ten months after last injection. Had not received potass. iodid. or hydrarg. perchlor. for six weeks. He had lost the dull apathetic look, and for the first time conversed freely with me. He is in the same class as his brother, who is $2\frac{1}{2}$ years younger, but is learning just as quickly. He can go messages, plays with other children, and is now able to defend himself against boys of his own age.

CASE 3.—G. G—, male, æt. $7\frac{1}{2}$. First seen on February 24th, 1913, because he had been dismissed from school on account of his inability to learn.

Father and mother alive and well. He is one of a family of three, all of whom are living. There is no history of miscarriages or still-births, or of syphilis in parents or family. The other children are quite normal.

Patient was a healthy baby at birth, walked at twelve months, and talked at eighteen months. Until he was sent to school he seemed quite a normal child. At school he is well behaved, but is making no progress, and his mother states that he is gradually getting duller. He used to go out to play, and could be sent messages, but now he takes no interest in anything. If thwarted at home he is subject to severe fits of passion, which will last for one or two hours, during which he is destructive. He has also not been thriving of late.

The Wassermann reaction is strongly positive in both the patient and his mother.

On March 25th, 1913, he received an intramuscular injection of 0.35 grm. neo-salvarsan, which caused great induration and tenderness, and in consequence it was decided to administer the drug intravenously. From April 8th till May 6th, *i.e.*, a period of four weeks, he received five intravenous injections of neo-salvarsan in doses varying between 0.3 and 0.45 grm., in all 1.75 grm. At the same time he was treated with mercurial inunctions.

As a result of the treatment he improved considerably. On September 7th he had been back at school, and seemed more interested. He could again be trusted to go messages, and always brought back the correct change, which before he invariably spent on sweets. Violent fits of temper had ceased, and his general health had also improved, but he was still very backward mentally. After this he was lost sight of, but recently it was learned that about Christmas, 1913, *i.e.*, seven and a half months after the last injection of neo-salvarsan, he commenced to take convulsions, and suffered from severe headaches. This state of matters persisted until the middle of March, 1914, when he developed blindness. Soon afterwards the convulsions and headaches became more violent and head retractions appeared. He died three weeks later.

CASE 4.—W. B—, male, æt. $8\frac{1}{2}$. First seen on January 22nd, 1913.

Father and mother are alive and well. Mother has had six pregnancies. Patient is the first, and the second was still-born. There have been no miscarriages. The other children are alive and well. Patient learned to walk at two years, and to talk at three years, but he has never been bright, and never been to school.

When first seen he was an undersized mentally deficient child, most of his time sitting in a chair with his head rolling from side to side. He could walk, but very unsteadily, and nearly fell. His head was large and square, with prominent forehead, and of a definite hot-cross bun shape. Round the mouth were linear cicatrices, and an eczematous condition implicating the mucous membrane of the lips. Both upper central incisors were notched, and interstitial keratitis was also present.

Between October 16th and November 8th, *i.e.*, a period of three and a half weeks, he received four intravenous injections of neo-salvarsan in doses varying between 0.3 and 0.4 grm.; in all 1.3 grm. neo-salvarsan was administered. At the same time mercury was prescribed. After the injections he seemed more interested in things, and commenced to run about and play, but on account of his eyesight getting worse he could not be sent to school.

One month after the last injection the Wassermann reaction was still strongly positive. His general health was much improved, he was brighter mentally, and could go messages. His eyesight was not so good, and seemed to be getting rapidly worse.

Seen again on June 18th, 1914: General health continued good, he was mentally brighter, but was now completely blind. In the right eye there was a slight degree of optic atrophy with disseminated choroiditis, and in the left an extensive cataract.

Each of these cases was a very marked example of mental deficiency, three of them being frankly idiots. The treatment had a most salutary effect, and although it did not bring them up to a normal level, it made it possible for two of them to be educated and to look after themselves. In milder cases, and especially if the treatment were commenced earlier, it might be possible to obtain complete cures.

Conclusions.—(1) Syphilis is a frequent cause of idiocy.

(2) In syphilitic idiocy there may be no luetic stigmata.

(3) Neo-salvarsan when introduced intravenously or intramuscularly has a very marked effect in improving the mental condition.

J. R. LORD.

4. Pathology of Insanity.

The Treponema of General Paralysis [*Le tréponème de la paralysie générale*]. (*Bull. Soc. Clin. Méd. Ment.*, June, 1914.) Marie, A., and Levaditi, C.

The authors attempt to show that the treponema of general paralysis differs biologically from that of ordinary syphilis. The hypothesis that a special syphilitic virus is concerned in the ætiology of tabes and general paralysis has been discussed by many clinical observers. They have remarked the occurrence of general paralysis or tabes in several subjects infected from the same source, the frequency of conjugal general paralysis, and the cases recorded by Morel, Fournier, Babinski, Mott, Brossius, Beaussart, and Marie have demonstrated that certain sources of the specific virus undoubtedly determine the occurrence of cerebro-spinal infections. The discovery of the treponema in the

brains of general paralytics, and its inoculability in the rabbit, permit us to attempt to verify this hypothesis.

The authors' virus was obtained from a general paralytic who had been syphilised fifteen years previously. Blood from this case was injected into the skin of the scrotum in several rabbits, and in one animal produced cutaneous lesions with many spirochætes. This virus was then passed through a series of rabbits, and the results compared with those due to the virus of ordinary syphilis (Truffi's virus), with which experiments had been conducted during the past six years.

The following differences were noted :

(1) *Period of incubation.*—In the case of the general paralytic virus this is particularly long; 127 days in the first inoculation, 94, 46, and 49 days in succeeding ones. In Noguchi's two positive cases it was 87 and 102 days (cerebral virus); in those of Graves, working with a blood virus, it was 49 and 63 days.

(2) *Character of lesions.*—(a) Macroscopically. The general paralysis virus produced superficial lesions, erosions covered with scales, and surrounded by a zone of dermic infiltration, and never the deep, indurated ulcers such as result from Truffi's virus.

(b) Microscopically. The lesion resulting from the general paralysis virus consists of a thickening of the dermis, and an infiltration of the papillæ and all the superficial layers of the dermis with mononuclear and plasma cells. The epidermis desquamates, and finally ulcerates. There are few signs of endarteritis, but an intense perivascular inflammation without obstruction of the vessels. On the contrary, in the lesions due to Truffi's virus the infiltration and endarteritis are marked, and the deeper tissues much more affected. Finally, and most noteworthy, is the high elective affinity which the general paralysis virus shows for the surface epithelium. The treponemas multiply by preference at this level, separating the cells from the basal layer, and even penetrating into the cells.

(3) *Evolution.*—The lesions resulting from the general paralysis virus tend to heal with extreme slowness (169 to 195 days).

(4) *Virulence.*—Truffi's virus, even after numerous transmissions through rabbits, is still capable of infecting the lower apes (24 days' incubation), and the chimpanzee (45 days). The general paralysis virus is incapable of conveying the infection to apes or chimpanzee, and is apparently pathogenic only for the rabbit.

(5) *Crossed immunity.*—The spontaneous cure of a chancre in the rabbit produces immunity. But, from an experiment of the authors, it appears that the general paralysis virus does not give immunity as regards Truffi's virus, and inversely. A rabbit cured of the general paralysis lesion, and four controls, were inoculated with Truffi's virus. All contracted syphilis. Another, cured of the ordinary lesion, and two controls, were similarly inoculated with the general paralysis virus. All showed spirochætes on the forty-ninth day. This research is still being carried on.

If, in addition, one takes into account the feeble pathogenicity of the spirochætes from the brain of the general paralytic for the rabbit (the authors' experiments and the sixty negative inoculations of Forster and

Tomaszewski), it is difficult to doubt that a marked biological difference exists between the virus of the general paralytic and that of ordinary cutaneous and mucous syphilis. The authors consider that the treponema of general paralysis is a separate neurotropic variety of the *Treponema pallidum*. Its affinity for nervous tissue explains the late development of cerebral manifestations; its presence, possibly in symbiosis, with the ordinary treponema in certain sources of infection, would account for the occurrence of general paralysis in subjects infected at these sources, and not in others.

The uselessness of arsenical treatment in general paralysis must not be attributed to any special resistance of this virus to arsenic, since experiments in rabbits have shown that the lesions due to the general paralysis virus are amenable to treatment with arseno-benzol.

W. STARKEY.

The Relations of Internal Secretions to Mental Conditions. (Monthly Cyclop., Jan., 1914, and Amer. Journ. Med. Sci., Aug. 13th.) Frankl-Hochwart, L. v.

In the so-called "formes frustes" of Basedow's disease the exophthalmos is often altogether absent or only suggested. They are often grumbling, hypochondriac, melancholic, and egotistic persons. In completely developed Basedow's disease manic features are often pronounced. They are talkative, spasmodic in their thoughts and actions, and sometimes incline to witticisms. Erotic subjects are preferred, and they are given to sexual excesses. Opposed to the picture of Basedow's disease, of hypertrophy of the thyroid-gland tissue, is the picture of atrophy and degeneration. Most striking is the condition of the adult myxœdematous patients. The principal factor is the complete lack of emotion. A considerable rôle is ascribed to the thyroid gland in emotional life. According to Lévi and Rothschild, it is the "glande de l'émotion." The similarity of the picture of fear emotion and that of Basedow's disease should be remembered: The protuberance of the bulbi, tremors, tachycardia, congestions which alternate with pallor, outbreaks of perspiration, diarrhœas, etc. The myxœdematous, according to Charcot, may be compared to hibernating animals: dull-witted, indifferent, unable to work, disinclined to sexual activity; the memory gradually decreases, the power of judgment becomes minimal, and the patients often lie in bed apathetically for days, almost without desire for food or drink. Severe psychoses are by no means rare in these patients.

As regards the *parathyroids*, the author has described psychoses in individuals who had fallen ill of typical tetany. These individuals normally are excitable, timid, uneasy, quarrelsome, and inclined to outbreaks of temper. Depression is occasionally present, but is not one of the dominant symptoms. In the psychoses conditions of temper and excitement predominate. The author found among his old patients with tetany several who had grown excitable and irritable. In those who had myxœdematous phenomena, symptoms of mental lassitude appeared which were not recognisable in the other forms. In strumectomised animals peculiar psychic changes have been described. Blum mentions hallucinations in strumectomised dogs, as well as changes of characteristics, idiocy, and pathologic motor phenomena. Horsley

and Pineles saw similar phenomena in monkeys. Erdheim observed conditions of excitement in rats, and stated that these are connected in some way with tetany, as on the days when the animals are excited tetany often reappears.

Basch and Klosevoigt, referring to the feeble intelligence of animals whose *thymus* had been extirpated, speak of an "idiotic thymoprivia."

Hypophyseal affections must be divided into two large groups, acromegalia, and the dystrophia adiposogenitalis. Boyle and Beadles, among 3,000 necropsies of the insane, found tumours in twenty, six of them hypophyseal. The number of actual hypophyseal psychoses is somewhat over-estimated, but the fact that psychoses are so frequent in affections of the pituitary body gives food for thought, in spite of their association at times with the destruction of tissue in other parts of the brain. The author has seen many cases of pituitary body tumour, and has noticed a psychic change, a peculiar indifference, a certain contentment, a euphoria which is not in harmony with the symptoms, such as headache and blindness. The patients are calm, and have a childish confidence in the doctor. The sleepiness of the patients is pronounced, but if they are forced to arouse themselves, their intelligence has not suffered nearly so much as we would be led to believe by the outward impression they made.

The psychic factor may best be studied by observing operated cases. The author has seen cases operated on by the Schloffer (cases of v. Eiselsberg and Hochenegg), or the nasal method of Hirsch. It is remarkable how lively, agile, and communicative the patients become. The entire psychic condition of the corpulent person partakes of that of individuals with constitutional obesity. The peculiar mental slowness, indecision, good nature, and sleepiness of these people is proverbial. Loss of hair is not uncommon.

It is not uninteresting to compare the acromegalic with the physiologic giants. They have often a peculiar heavy manner and lack of initiative. The psychic peculiarity of hypophysis patients is of interest from the fact that the animal experiments of Cushing, in Baltimore, and Aschner, in Vienna, showed that in hypophysectomised dogs the psychic changes correspond with those of human beings. According to Cushing, animals with hypopituitarism become psychically abnormal: at times they are lazy and sleepy, then playful and excited.

If in early childhood tumours (teratoma) develop in the *pineal gland* a picture is presented which is more intelligible since the observations of Gutzeit, Ogle, Oesterreich, Slavik, Neumann, Marburg, Bailey, and Jelliffe. The features of premature sexual development are combined with an unusual development of fat. In a boy, æt. 4½, who had always been large and somewhat fat, the genitals developed remarkably. He had the symptoms of a cerebral tumour (headache, vomiting, epileptic attacks, paralysis of the eye muscles, and choked disc). The necropsy findings show a teratoma of the pineal gland. One point in this observation is of importance, the early development of the mental condition. The boy was over-intelligent, and had an inclination to discuss ethical philosophic questions. In his fifth year he showed the same psychic peculiarities that are displayed by youths during puberty.

There are also signs of early psychic development in the cases of

Oksterreich and Slavic and Raymond and Claude. The hypothesis therefore was that the pineal gland was to be considered among the blood glands, and that it influenced genital development. Its absence causes premature genital development, and psychic development corresponding to the age of puberty.

Of the abdominal glands the *pancreas* and its internal secretion play a large part in relation to diabetes. Diabetics often show mood anomalies, and we speak of actual diabetic psychoses.

The study of *suprarenal capsule* affections gives us more positive points of knowledge. The connection between disturbances of brain development and hypoplasias of the suprarenal capsules is of importance in the subject under discussion. Leri, in three cases of melancholia, found destruction of the suprarenal capsules. There are occasional cases of Addison's disease with a tuberculous destruction of the organs mentioned. These individuals are weak, exhausted, and hopeless, in contrast to the euphoric patients, with tuberculosis of the lungs. Irritability and depression are almost always present. Psychoses of various kinds have also been observed, depression seemingly predominating.

J. R. LORD.

A Note on the Relative Weight of the Liver and Brain in Psychoses.
(*Journ. Nerv. and Ment. Dis.*, July, 1914.) Myerson, A.

This is the first of a series of papers concerning the condition of the organs in the psychoses. A relation of brain changes to many of the psychoses has not as yet been determined, and there is at least some ground for expecting that light on the pathology of the psychoses may come from a systematic study of the organs.

The liver has been the first organ selected to be studied, and this paper concerns itself entirely with the weight of this organ, as compared with the weight of the brain, in persons dying in Taunton State Hospital. The one organ of the body which under normal conditions is heavier than the brain is the liver, and therefore the weight ratio affords a convenient measure of orientation.

At twenty-five years of age the average liver weight in males is 1,600-1,700 grm., according to Vierordt. The average brain weight at that age in males is 1,290-1,350 grm. In the female at the corresponding age and period of life, the average of the liver is from 1,520-1,600 grm., and the average weight of the brain 1,200-1,275 grm., that is to say the ratio of the liver to the brain is, roughly speaking, somewhere around 16-13.

The brain at the age of forty, or thereabouts, reaches its maximum weight, and from forty to sixty there is a slow, steady decline, although until the very advanced senile stage the decline is not very marked. The liver weight remains stationary from thirty to forty and then undergoes a more rapid decline than does the brain, so that at seventy to seventy-five its weight is somewhat less than the brain weight, even in normal old people. However, in the normal senile, the weight of the liver is rarely under 1,100 grm.

In looking over the factors that enter into the cause of change in ratio of the brain and liver, the first was the state of nutrition. That emaciation markedly reduces the weight of the liver has been borne out

in animal experiments. Under emaciation, then, changes in ratio of these two organs are to be expected even in young people, since the brain suffers but little loss of weight in starvation. Therefore the cases have been placed under two headings—emaciation and non-emaciation, and they were free from any local disease of the liver itself, such as carcinoma, abscess, cirrhosis of definite type, etc., and nutmeg livers have been excluded.

Series 1.—(a) Emaciated senile dementia: twenty-five cases. Most were females. Average weight of the liver, 940 grm.; average brain weight, 1,070 grm.

(b) Non-emaciated senile dementia: twenty-five cases. A little over half of whom were males. Weight of liver averaged 1,270 grm.; average weight of the brain, 1,270 grm. There is in this series a change of the liver ratio to the brain ratio, regardless of the state of nutrition. The liver has suffered an atrophy which is very much more marked than any corresponding change in the brain, and the microscopic examination showed, in a great many of the cases, a very marked fatty infiltration of the liver, so that the actual reduction of the liver tissue was much more extensive than is evident from the weight figures themselves. In other words, while *emaciation* is responsible for much of the reduction of the weight of the liver in senile dementia, *there is a reduction of the liver weight irrespective and independent of emaciation.*

Series 2.—A group of Dr. E. E. Southard's cases of dementia præcox have been taken, as considered in his paper on "Focal Lesions in Dementia Præcox." He found the liver weights of the males to average 1,369 grm., in the females, 1,257 grm., as compared with the normal male, 1,579 grm., normal females, 1,525 grm. The brain weight, though reduced somewhat from the normal, was less reduced. Since a large number of dementia præcox cases die emaciated, the loss of weight may be due to emaciation. Myerson analysed some of his figures a little more closely, and can present the following facts. Eight cases of dementia præcox in the third decade (from twenty to thirty years of age), showed a liver weight averaging 1,438 grm., brain weight, 1,341 grm.; in the fourth decade, the liver weight averaged 1,192 grm., the brain weight, 1,220 grm. In the fifth decade the liver weight averaged 1,350 grm., the brain weight, 1,250 grm. In the sixth decade the liver dropped still further, and after the sixth decade showed the usual senile change.

Series 3.—(a) Eleven cases of emaciated general paretics, liver weight, 1,330 grm., brain weight, 1,277 grm. All these cases were forty years or under. The liver weight dropped from the normal quite markedly, but has not reached the weight of the brain. (b) In fourteen non-emaciated parietic cases, the liver weight, 1,470 grm., brain weight, 1,250 grm. It will be seen that in cases of paresis, even with emaciation, the liver does not lose in weight to the extent that it does in many cases of dementia præcox. Some of the author's own cases of dementia præcox, not there recorded, show liver losses down to 800 grm., and reaching in some cases even to 600 grm., while practically none of the parietic cases show any such change. This may be due to a connective tissue increase in the livers of paretics, but there is very little such increase in paresis, and the maintenance of the weight of this organ in this disease

cannot be accounted for. It is probable that the brain weight in paresis is not a fair index of the brain changes, since there is a large increase in the neuroglia which makes up for the loss of weight in other directions, *e.g.*, in the nerve-cells.

Series 4.—A group of young epileptics, from twenty-five to forty, dying of sudden diseases, and all well nourished. Such factors as tuberculosis, diarrhoea, emaciation, etc., were eliminated. Most of the cases died of suffocation, acute lobar pneumonia, œdema of the lungs, etc. In thirteen cases, the liver weighed 1,150 grm., the brain 1,260 grm., a very marked reversal of the expected ratio. In seven cases, the liver weight averaged 1,350 grm., the brain 1,300 grm. That is to say, there was in the smaller series a somewhat heavier liver than brain, and in a larger series a much lighter liver than brain. So small a series is not sufficient from which to draw conclusions, nevertheless it points out a line of research in epilepsy. In looking over the protocols there are more changes recorded in the organs of epileptics than are recorded in the organs of paretics. That is to say, on superficial investigation there seem to have been more definite organic changes in a disease not known to be organic, than in a disease definitely known to be organic. Whether these changes are due to the epileptic attacks or cause them can only be determined by an extensive study of a long series of cases. It would even be necessary to note whether these changes showed a definite relation to the number and severity of the attacks, or whether they are very marked in those individuals dying after only a few attacks, etc.

A point which the author wishes to make is that senile dementia and paresis have one feature in common, which is that the changes in the brain found in both these conditions select the frontal lobe as their first and foremost place of incidence. The explanations for this, which vary from the vascular distribution, venous drainage, and biological order of development, are, on the whole, unsatisfactory. Not enough study has been done on the changes in the organs in general paresis and senile dementia. For example, Alzheimer, in his elaborate monograph on the histo-pathology of general paresis, dismisses the changes in the organs in a brief page or two, although admitting that there may be diagnostic changes in other places than the brain. It seems possible that there may be a grouping of bodily changes which brings about changes in the brain, and that even in a disease where brain pathology is a definite field of knowledge, investigation should be carried on to discover whether or not there are corresponding changes in the organs.

J. R. LORD.

5. Sociology.

Lombroso as an Alienist [*L'Œuvre Psychiatrique de Lombroso*]. (*Rev. de Psychiat.*, Feb., 1914.) Genil-Perrin, G.

Lombroso had intended to write a treatise on the "Insane Man." His daughter, Dr. Gina Lombroso, has carried out his wish, so far as it is now possible, by bringing together in one volume under the title of *L'Homme Aliéné*, all the scattered psychiatric essays published by her

father between 1859 and 1909. On the basis of this book, Genil-Perrin discusses Lombroso's place in psychiatry.

A simple idea presides over Lombroso's psychiatric work—the relationship of the psychic to the physical—but until that idea prevailed mental medicine could not achieve emancipation. That emancipation came in 1859—the year in which Lombroso's work opens—with the publication of Morel's famous *Traité*. Lombroso's work has seldom been judged with impartiality. The exaggeration of his ideas, their too rapid vulgarisation, their distortion by ignorant adepts, provoked in the scientific world an attitude of unjustified repulsion. Certainly in Lombroso's work we must know how to test and to modify. His impetuous spirit was always pushing ahead without waiting to elaborate. His writings are essays rather than well-digested treatises. His southern ardour was rebellious to the labour of verification. He always started from facts, but from those facts he rose too rapidly to generalisations which sometimes revealed genius, and were sometimes illusory, but were always hazardous. This romantic violence, these revolutionary utterances, necessarily aroused controversy. It was by a sudden intuition on a cold December morning in 1870, when examining a brigand's skull, that Lombroso threw out his atavistic theory of criminality, and in 1864, at a happy turn of his fortune at Pavia, that in a succession of sleepless nights he sketched his *Man of Genius*. Such enthusiastic outbursts injured Lombroso's reputation in the scientific world, while they brought him a popular notoriety which was equally injurious.

Yet Lombroso's work revealed new conceptions, which, in spite of their boldness, were fruitful. We must remember the dates of his writings, and that we cannot expect of precursors the precise methods of later workers. Lombroso had the defects of his qualities, but the qualities were there.

The book which Dr. Gina Lombroso has edited is of much interest for alienists, although that interest is now mainly historical. A chief merit of it, however, is that it shows the psychiatric importance of Lombroso's work as a whole. His criminological work has received more attention, but we must not forget that he was above all an alienist, and that it was from the study of insanity that he proceeded to the consideration of the largest sociological questions.

It was Lombroso's fundamental doctrine that man is an organic whole, with all the parts intimately bound together. Man's intelligence and instincts and appetites are not confined to special seats; they dwell in all his viscera, tissues, and functions. There is no anomaly or disorder on the physical side which is not reflected on the psychic side, no disorder on the psychic side but has an echo on the physical side. Thus the insane must be studied in their totality, and it was so that Lombroso attempted to study them, "as objects of natural history," biologically in the first place, and finally psychically. To classifications Lombroso assigned no great importance. He regarded them as purely conventional groupings, only useful for convenience in study. Therefore, to prevent confusion, they should be changed as little as possible. He considerably changed one category, however, that of epilepsy, and when we realise to what an extent he enlarged it—inserting hysteria, circular

insanity, moral insanity, obsessions, and much else—it is not surprising that he often came on the traces of “epilepsy.”

Prof. Bianchi, in a preface to *L'Homme Aliéné*, compares Lombroso's work to Charcot's. Genil-Perrin remarks that this is true in a different sense from that probably meant by Bianchi. The work of Charcot and his pupils is now largely out of date, because their interpretations were too hasty and sometimes forced. But the method of Charcot, the application to nervous pathology of clinical and anatomical investigation, is immortal. It is the same with Lombroso. The theories are often hazardous, but the method remains. When we place Lombroso's work in the right light, “that work may well seem to us one of the greatest scientific events of the nineteenth century.” HAVELOCK ELLIS.

The Personality of the Accused in the New Code of Penal Procedure [*La personalità del giudicabile nel nuovo Codice di Procedura Penale*]. (*Arch. di Anthropol. Crim.*, May-June, 1914). Bianchi.

In this address, delivered at the inaugural meeting of the Società di Anthropologia, Sociologia e Diritto Criminale, Prof. Bianchi discusses the present state of the relation between biological science and the criminal law, with special reference to the changes which have been recently introduced into the Italian Code of Procedure. As a result of these changes larger powers have been given to the courts to investigate the mental condition of accused persons, and particularly of juvenile offenders, and of offenders in whom there may be reason to suspect the existence of insanity or mental defect. While welcoming this reform as implying a partial recognition of the importance of the biological factor in criminality, Prof. Bianchi expresses regret that the legislature has not gone farther on this road, and has not boldly adopted the doctrine that crime is always and in all cases a manifestation of abnormality in the offender. This view he holds to be true not only of the grosser and more primitive forms of delinquency, but also of the subtle and ingenious frauds which constitute so important a feature of the modern evolution of commercialism, and which, though not technically coming within the reach of the law, imply in those who perpetrate them a degree of egotism and moral defect that must be regarded as pathological. This “frock-coated delinquency” has not, he considers, received the attention which it merits at the hands of criminologists, and he suggests it as a rich field for investigation, though admitting that it is hardly possible as yet to indicate very clearly the lines on which its scientific study is to be approached. Even in the cruder forms of criminality it is not always easy to furnish definite proofs of the pathological constitution of the offender, and biological science has still much to do before it can establish its predominant claim to decide on the treatment of the individual criminal. That it must assert, and will eventually establish, that claim Prof. Bianchi is convinced, and for this reason he is no advocate of compromise between the legal and the biological conceptions of crime. However much the opposition between these two points of view may be masked by such concessions to modern ideas as are embodied in the new Italian code, no final solution of the difficulty is possible until the principles and methods of biology have

permeated legal theory and practice. As a striking instance of the divergence between the two attitudes, the author points to the reluctance of the lawyer to accept the principle of the indeterminate sentence for recidivist criminals, though this principle must be admitted as an inevitable inference from the doctrine which considers criminality as the expression of a vice of organisation. Meanwhile we are traversing a period of confusion of thought, and are attempting to unite the incompatible principles of the classical and the biological schools of criminology, with the result that, while we have very properly abandoned the old punitive methods, we have failed to adopt in their place the effective measures which science indicates for the protection of society against the criminal.

W. C. SULLIVAN.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND.

THE QUARTERLY GENERAL MEETING of the Association was held at No. 11, Chandos Street, London, W., on Tuesday, November 24th, 1914, Dr. David G. Thomson, President, in the chair.

There were present: Drs. T. S. Adair, Fletcher Beach, E. H. Beresford, F. St. John Bullen, R. B. Campbell, J. Chambers, R. H. Cole, M. Craig, H. Devine, A. R. Douglas, T. Drapes, J. H. Earls, C. F. Fothergill, B. Hart, G. H. Johnston, J. Keay, N. T. Kerr, P. W. MacDonald, H. J. Mackenzie, W. F. Nelis, D. Orr, G. E. Peachell, J. G. Porter Phillips, G. M. Robertson, R. G. Rows, J. Noel Sergeant, G. E. Shuttleworth, R. P. Smith, J. G. Soutar, J. B. Spence, R. H. Steen, R. C. Stewart, H. Wolseley-Lewis, and M. A. Collins (Hon. Gen. Sec.).

A letter of regret was received from the Honorary Treasurer, Dr. Hayes Newington, regretting his enforced absence from the meeting on account of illness.

Present at the Council Meeting (November 24th, 1914): Drs. D. G. Thomson, T. S. Adair, E. H. Beresford, R. B. Campbell, J. Chambers, R. H. Cole, M. A. Collins, H. Devine, T. Drapes, A. R. Douglas, B. Hart, J. Keay, N. T. Kerr, H. J. Mackenzie, W. F. Nelis, G. M. Robertson, R. G. Rows, J. Noel Sergeant, J. G. Soutar, R. H. Steen, H. Wolseley-Lewis.

MINUTES.

The PRESIDENT said that the minutes of the May quarterly meeting were published in the Journal for July, and those of the August special meeting in that of October. A special meeting was held in September, and he would ask the General Secretary to read the minutes of that meeting. Both special meetings were in connection with the revision of the Articles of Association.

The minutes were duly approved and signed.

RESOLUTION OF COUNCIL RESPECTING THE ROYAL ASYLUMS OF SCOTLAND.

The PRESIDENT asked the Secretary to read a resolution which was passed at the meeting of the Council held that day.

The SECRETARY read the resolution, as follows:—

"The Council of the Medico-Psychological Association of Great Britain and Ireland direct the attention of the Association to the hardships of the Staffs of the Royal Asylums of Scotland, which are not included under the benefits of the Asylum Officers' Superannuation Act; and recommend that letters be written to the Managers of the Royal Asylums, the Scottish Board of Control, and Sir John Jardine on the subject."

The resolution was unanimously adopted.

ELECTION OF CANDIDATES AS MEMBERS.

The following gentlemen were balloted for and duly elected ordinary members :
CROSTHWAITE, FREDERICK DOUGLAS, M.B., Ch.B.Edin., D.P.H.Cantab.,
 Assistant Physician, Pretoria Mental Hospital, South Africa.

Proposed by Drs. A. D. Pringle, H. Egerton Brown, J. M. Moll.

MANIFOLD, ROBERT FENTON, M.B., B.Ch.Dub. Univ., Senior Assistant Medical Officer, Denbigh Asylum, N. Wales.

Proposed by Drs. James F. Gemmel, J. G. Blandford, R. Stewart.

RUSSELL, WILLIAM, M.B., Ch.B.Edin., Dipl.Psych.Edin., D.T.M.Edin.,
 Assistant Physician, Pretoria Mental Hospital, South Africa.

Proposed by Drs. A. D. Pringle, H. Egerton Brown, J. M. Moll.

WATSON, HARRY CHRISTIAN, M.B., Ch.B., B.A.O., R.U.I., Assistant Physician, Pretoria Mental Hospital, South Africa.

Proposed by Drs. A. D. Pringle, H. Egerton Brown, J. M. Moll.

ALTERATION OF BYE-LAW 55.

The PRESIDENT said that this was a formal matter, namely, a suggestion by the editors that the Bye-law be altered so that the words "next after the Annual Meeting" be deleted, and the words "in January" be inserted in their place.

The SECRETARY said that the Bye-law, No. 55, directed that the lists of Officers, Trustees, and Members of the Association should be published in the number of the Journal next after the annual meeting. That was a very inconvenient requirement, and he believed it had never been carried out; and now that the bye-laws were being reprinted, it was thought better that the bye-law should accord with the custom, namely, to publish the list in the January number, which would be convenient for all concerned.

The alteration was approved.

THE QUESTION OF THE HOLDING OF MEETINGS DURING THE WAR.

The PRESIDENT said that this matter was considered by the Council that day, and it was thought desirable to hold the quarterly meeting, as usual, in February next; but, instead of, as had been hoped, holding it in Birmingham, to which city the Association had been kindly invited by the Visiting Committee and Medical Superintendent of Bromsgrove Asylum, it would be held in London, and without any festive accompaniments.

This was agreed to.

INJURY TO DR. HETHERINGTON.

The PRESIDENT said it had just come to his knowledge that a colleague, Dr. Hetherington, of one of the Irish asylums, had been seriously assaulted by a patient, and he asked if Dr. Drapes could give any information about the distressing occurrence.

Dr. DRAPES said he could not give much information. It was on the day of the Irish meeting that he heard about the occurrence, for Dr. Hetherington intended being present at the meeting, but a wire was received stating that he had been attacked by a patient and wounded, but it was hoped that the wound was not serious. Two days ago he heard from Mrs. Hetherington that the doctor was going on well, and that serious results were not anticipated, which he was sure the meeting would be glad to hear.

The Secretary was directed to send a letter of condolence to Dr. and Mrs. Hetherington.

THE LATE DR. SIDNEY NELSON CROWTHER.

The SECRETARY said he had received an intimation that Dr. Sidney Nelson Crowther, who recently was appointed Superintendent of Netherne Southern Counties Asylum, and who had enlisted as a motor-cyclist scout, was recently killed in action. He felt sure that the Association would wish to send a message of sympathy to his relatives. Dr. Crowther had served in a similar capacity in the South African War.

The PRESIDENT moved that a letter of condolence be sent to the relatives of the late Dr. Sidney Crowther, expressing the Association's sorrow at the sad event. Approved.

THE LATE DR. HAROLD SHAW.

Dr. PERCY SMITH said the Association would be sorry to learn of the death, after a short illness, of Dr. Harold Shaw, of the Isle of Wight Asylum.

The PRESIDENT moved that a letter of condolence be sent to the relatives of Dr. Harold Shaw. Approved.

THE FATE OF THE BELGIAN ASYLUMS.

The PRESIDENT said he had been asked by several lay people in his neighbourhood whether he could tell them what had happened to the Belgian asylums during the terrible devastation which had accompanied this war. He was unable to answer the question, and he wondered whether any of his colleagues could give any information on the subject. Gheel, the celebrated colony asylum, was somewhat to the north of the track of invasion, and hence it had possibly not suffered much. But he thought there must be several asylums in the centre and the south of Belgium which had suffered. One of the daily papers contained a story of one, but it was very incomplete.

No members present, however, were able to supply any information, and the matter dropped.

The meeting then terminated.

REVISION OF BYE-LAWS.

A SPECIAL Meeting was held at 11, Chandos Street, London, on Tuesday, September 22nd, 1914.

Present: Drs. Fletcher Beach, Bower, Cole, Elgee, Hart, Lord, Ogilvy, Stansfield, Stilwell, Stoddart, Soutar, and M. A. Collins (Hon. Gen. Secretary).

In the absence of the President and ex-President, who both sent letters of apology, Dr. J. G. Soutar was elected to the chair.

The Chairman explained that the Companies Act required a second special meeting to confirm the resolution passed at the special meeting held on August 24th last.

Dr. Fletcher Beach proposed and Dr. Stansfield seconded the confirmation of the resolution (see p. 694, vol. ix). Carried.

The meeting then terminated.

NORTHERN AND MIDLAND DIVISION.

THE AUTUMN MEETING of the Northern and Midland Division was held by the kind invitation of Dr. Graeme Dickson at Wye House, Buxton, on Thursday, October 22nd, 1914. Dr. Dickson presided.

Members present.—Drs. G. Dickson, E. S. H. Gill, R. W. D. Hewson, G. R. Jeffrey, R. Legge, S. R. Macphail, J. M. Mathieson, J. Middlemass, R. C. Stewart, W. Vincent, and T. S. Adair (*Hon. Divisional Secretary*).

Regrets of inability to attend were received from the President (Dr. Thomson), Drs. Douglas, Pierce, and Johnson (Harrogate).

The minutes of the last meeting were read and confirmed.

Richard R. Kirwan, M.B., B.Ch., B.A.O., R.U.I., Assistant Medical Officer, W. R. Asylum, Menston, Leeds—*proposed by* Drs. Edgerley, Walker, and Adair—was unanimously elected an ordinary member of Association.

On the proposal of Dr. Macphail, seconded by Dr. Vincent, Drs. McDowall, Pierce, and Street were unanimously re-elected to form the Divisional Committee for the next twelve months.

Dr. R. C. STEWART then read a short paper on "Restraint in Mental Disease," with the object of opening up a discussion on this subject. He dealt with restraint

in its widest sense, and considered briefly mechanical restraint, the use of single rooms, the question of locked doors in asylums, treatment by sedatives, etc. He was of opinion that everything that took away the feeling of restraint tended to benefit the patient.

The paper was followed by an interesting discussion, in which every member present took part, and various opinions were expressed on the numerous points raised.

One speaker held very strong opinions about mechanical restraint, and thought it never ought to be used, or only in very rare cases. He considered it had a bad moral effect on the nursing staff. Seclusion appeared to him only a lesser evil, and he did not like using drugs. It had always been a difficult problem with him to decide what was the best treatment for perverse old chronic patients.

A distinction was drawn between acute and chronic cases, and it was generally agreed that the difficulty of finding a suitable means of restraint lay in the case of the latter.

The use of verandahs, and sleeping out of doors, for noisy patients were considered beneficial.

The various forms of sedatives in use were referred to, and special reference was made to the use of bromides.

The limitation of airing courts by unclimbable fencing, and the old question of the locked asylum door were to some extent dealt with.

It was suggested that too many single rooms were provided in many asylums, and that they might be better used as "privilege" rooms than for the isolation of noisy patients.

Dr. Stewart replied, after which a hearty vote of thanks was accorded to Dr. Dickson for his kind hospitality, also to the Manager of the Buxton Baths, the Secretary of the Devonshire Hospital, and the Buxton Gardens Committee, for the kind facilities extended by them to the members. The Secretary was instructed to convey to them the thanks of the meeting.

SOUTH-EASTERN DIVISION.

THE AUTUMN MEETING of the South-Eastern Division was held, by the courtesy of Dr. Rawes and the Governors, at St. Luke's Hospital, on Thursday, October 8th, 1914.

Among those present were: The President (Dr. D. G. Thomson), Drs. W. H. Bailey, F. Beach, D. Bower, A. H. Boyle, R. Brown, P. E. Campbell, J. Chambers, M. A. Collins, A. R. Douglas, F. H. Edwards, C. F. Fothergill, R. W. Gilmour, J. L. Gordon, D. Green, W. J. H. Haslett, H. E. Haynes, F. P. Hughes, G. W. B. James, R. Armstrong-Jones, G. E. Miles, Sir James Moody, N. Navarro, H. H. Newington, H. J. Norman, N. H. Oliver, G. E. Peachell, W. Rawes, Sir George Savage, J. Scott, G. E. Shuttleworth, R. Percy Smith, R. H. Steen, H. F. Stilwell, R. J. Stilwell, J. Turner, F. Watson, W. R. Watson, S. A. K. Wilson, and J. Noel Sergeant (Hon. Divisional Secretary).

Expressions of regret at inability to be present were received from several members.

At half-past one, the members were entertained to luncheon, at the conclusion of which Dr. Thomson proposed the health of the host—Dr. Rawes—which was drunk with acclamation.

The Meeting of the Divisional Committee was held at 2.15 p.m.

Parts of the Hospital were inspected by the members.

The General Meeting was held at 3.30 p.m., Dr. Thomson in the Chair.

The minutes of the last meeting, having been printed in the Journal, were taken as read and confirmed.

Dr. T. E. K. Stansfield was elected a Representative Member of the Council for the remainder of the year 1914-15.

The following gentlemen were elected Ordinary Members of the Association:

Victor Lindley Connolly, M.B., B.Ch., B.A.O., Assistant Medical Officer, Colney Hatch Asylum, New Southgate, N. (Proposed by Drs. F. J. Gilfillan, Samuel Elgee, and John Macarthur.)

Samuel Edgar Martin, M.B., B.Ch.Edin., Barrister-at-Law, Senior Assistant Medical Officer, St. Andrew's Hospital, Northampton. (Proposed by Drs. B. Rambaut, N. R. Phillips, and J. Noel Sergeant.)

Ernest Haines Walker, M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, East Sussex County Asylum, Hellingly. (Proposed by Drs. F. R. P. Taylor, J. N. Greene Nolan, and W. Rees Thomas.)

Gwilym Ambrose Williams, L.R.C.P.Lond., M.R.C.S.Eng., Pathologist and Assistant Medical Officer, East Sussex County Asylum, Hellingly. (Proposed by Drs. F. R. P. Taylor, J. N. Greene Nolan, and W. Rees Thomas.)

The invitation of Dr. Sergeant to hold the next Spring Meeting at Newlands House on April 29th, 1915, was accepted with much pleasure.

Dr. H. J. NORMAN then read his paper on "Friedrich Nietzsche" (see p. 64).

Dr. THOMSON voiced the appreciation of the Meeting for this interesting communication. Sir GEORGE SAVAGE and others also spoke.

At the conclusion of the Meeting the members were entertained to tea.

The members dined together in the evening at the Café Monico.

SOUTH-WESTERN DIVISION.

THE AUTUMN MEETING of this Division was held at the University, Bristol, on Thursday, October 22nd, 1914. Dr. Aveline presided.

Members present: Drs. Adams, Bullen, Brown, Cole, Lavers, McBryan, Nelis, Perdrau, Read, Thomas, Wigan, White, and the Hon. Divisional Secretary (Dr. Blachford). Dr. Macphail was present as a visitor.

Letters of regret for non-attendance were read from the President (Dr. Thomson) and Dr. MacDonald.

The minutes of the last meeting were read and signed.

The Hon. Divisional Secretary was nominated for re-election.

Drs. Lavers and Pope were nominated for election as Representative Members of the Council.

Charles Williams, L.R.C.P. and S.E., L.S.A.Lond., Assistant Medical Officer, The Warneford, Oxford—proposed by Drs. A. W. Neill, T. S. Good, A. McWilliam—was unanimously elected an Ordinary Member of the Association.

The Spring Meeting was fixed for Thursday, April 22nd, 1915.

An interesting paper on "Freud's Interpretation of Dreams" (see page 17) was contributed by Dr. BULLEN, and Drs. STANFORD, READ, and COLE took part in the discussion which followed, and were replied to by Dr. Bullen.

The members afterwards dined together at the St. Stephen's Restaurant.

SCOTTISH DIVISION.

A MEETING of the Scottish Division of the Medico-Psychological Association was held in the Royal College of Physicians, Queen Street, Edinburgh, on November 13th, 1914.

Present: Sir Thomas Clouston, Drs. Dods Brown, Carswell, Cruickshank, Chislett, Gostwyck, Hotchkis, Carlyle Johnstone, Keay, Kerr, Oswald, Orr, G. M. Robertson, Ford Robertson, Ross, Maxwell Ross, Shaw, Sturrock, and R. B. Campbell, Divisional Secretary.

Dr. Oswald occupied the chair.

The minutes of the last Divisional meeting were read and approved, and the Chairman was authorised to sign them.

Apologies for absence were intimated from Dr. Thomson, President of the Association, Drs. Yellowlees, Turnbull, Easterbrook, McRae, Mackenzie, Carre, and Crichtlow.

Before taking up the ordinary business of the meeting, the CHAIRMAN offered the congratulations of the Division to Dr. Keay on his nomination as President-elect of the Association, and Dr. KEAY thanked the Division for their kind congratulations and good wishes.

The CHAIRMAN also referred, in suitable terms, to the recent resignation of Dr. A. R. Turnbull from the Medical Superintendentship of Fife and Kinross

District Asylum, and he considered that this event could not pass without the Division recognising the long and valuable services which Dr. Turnbull had rendered to the Scottish Division, and also his services in the interests of lunacy, and at the same time expressing the hope that he would be long spared to enjoy his well-earned retirement. It was unanimously resolved that the Secretary be instructed to send an excerpt of the minutes to Dr. Turnbull.

The Business Committee was appointed, consisting of Drs. Carlyle Johnstone, G. M. Robertson, McRae, Kerr, Orr, and the Divisional Secretary.

Drs. Neil T. Kerr and J. H. C. Orr were nominated by the Division for the position of Representative Members of Council, and Dr. R. B. Campbell was nominated for the position of Divisional Secretary.

The following four candidates, after ballot, were admitted to membership of the Association:

(1) Alfred William Harper Cheyne, M.B., Ch.B., Assistant Physician, Royal Asylum, Aberdeen. (Proposed by Drs. Reid, Alexander, and Campbell.)

(2) Thomas Chivers Graves, M.B., B.S., F.R.C.S. Eng., B.Sc., Assistant Physician, Royal Asylum, Edinburgh. (Proposed by Drs. G. M. Robertson, Maxwell Ross, and Henry Yellowlees.)

(3) Hugh Kirkland Shaw, M.B., Ch.B., Assistant Physician, Stirling District Asylum. (Proposed by Drs. Campbell, Keay, and Gostwyck.)

(4) William John Tulloch, M.D., Director Western Asylums Research Institute, 10, Claythorn Road, Glasgow. (Proposed by Drs. Oswald, Parker, and Macdonald.)

GRAM-NEGATIVE DIPLOCOCCI IN DEMENTIA PRÆCOX.

Dr. FORD ROBERTSON read a communication on the "Gram-negative Diplococci in Dementia Præcox." He stated that the question of these diplococci had arisen in the course of a systematic investigation into the infective conditions associated with dementia præcox. He showed the characters of the bacteria of this group obtained from the gums in eighteen cases of dementia præcox, and compared them with those isolated from the mouth or respiratory tract in eighteen control cases. The main conclusion drawn from the investigation was that the Gram-negative diplococci that abounded in the gums in many cases of dementia præcox were simply the *Micrococcus catarrhalis*, and the varieties of the *Micrococcus pseudocatarrhalis* that were to be found with equal frequency in other persons suffering from chronic catarrhal conditions of the respiratory tract. No evidence had been obtained of the occurrence of any special Gram-negative diplococcus, or of tissue invasion by any member of the group.

Interesting papers were contributed by Drs. GOSTWYCK and MAXWELL ROSS on "Juvenile General Paralysis" and "The Luetin Test in Parasyphilis" respectively.

A vote of thanks to the Chairman for presiding concluded the business of the meeting.

IRISH DIVISION.

THE AUTUMN MEETING of the Division took place on Thursday, November 5th, 1914, at the Royal College of Physicians, Dublin. Dr. T. Drapes was in the chair. The other members present were: Drs. J. O'C. Donelan, Eustace, Gavin, Greene, O'Neill, Rainsford, Redington, Rutherford, and Dr. Leeper (Div. Hon. Secretary).

The minutes of the previous meeting were read and signed by the Chairman.

A letter from Mrs. Hetherington was read, informing the members that Dr. Hetherington was unavoidably prevented from attending the meeting owing to his having been attacked and wounded by a patient in his asylum. A telegram of condolence was sent to Dr. Hetherington by the Chairman on behalf of the meeting.

It was proposed by Dr. Rainsford and seconded by Dr. Greene, and passed unanimously: "That this meeting of the Irish Division of the Medico-Psychological Association begs leave to tender to their fellow-member, Sir John Lentaigne, the expression of their most sincere sympathy with him in the great loss he has

sustained by the death of his son, Lieutenant Victor Lentaigne, while serving with the Expeditionary Force."

Dr. Edward Joseph McKenna, M.B., B.Ch., B.A.O., Assistant Medical Officer, Carlow District Asylum, proposed by Dr. T. H. Greene, was balloted for and unanimously elected an ordinary member of the Association.

Dr. J. O'C. DONELAN read his paper, "A Case of Recurrent Purpural Eruption." (See p. 109.)

THE USE OF HYPNOTICS IN ACUTE MANIA.

Dr. RAINSFORD, in opening the adjourned discussion from the Summer Meeting, said he was in many ways ill-equipped for introducing a subject so full of interest, for he was one of the few asylum medical superintendents who had never used any of the new hypnotics. He would speak of the subject under two heads: (1) Drugs to produce sleep; (2) drugs to produce quiet. As regards the first, probably nothing called for more anxious thought than the selection of a suitable drug to produce sleep in any given case. Personally, he would say the great desideratum was to procure for a patient a healthy sleep with the least possible risk to the individual. As regards drugs of this class, he thought paraldehyde best answered all the requirements, and he had many cases where prolonged and hitherto intractable cases of insomnia had been cured. He started generally with *5ij*, gradually diminishing the dose. Trional, while it had many disadvantages, and was stated to cause nerve degeneration, was, in doses of 20-25 gr., very useful as an occasional hypnotic, but should not be given to any case oftener than once a week. Sulphonal he had not used for many years. He regarded chloral as the best hypnotic of all in suitable cases, as the sleep it procured was of a very refreshing character. He found the combination known as the "three fifteens" admirable, *vis.* 15 gr. chloral hydrate, 15 gr. potassium bromide, and 15 minims liq. *opii sedativus* (Battley). As regards opium as a hypnotic, he would only say that, as a rule, it was a safe drug, but it must be given in a sufficiently large dose, as too small doses only caused excitement. Veronal he had only used in two or three cases and he knew nothing to commend it. As regards the second head, he would like to say he was no advocate for the indiscriminate use of what might be termed "chemical restraint," but he freely recognised that there were cases where it was necessary. For many years he had been taught that half-ounce doses of tinct. *hyoscyamus* were very useful, and he could testify to the excellent results from its employment, and he had never seen any unpleasant after-effects, and an old medical superintendent used to say that it made the patient so thirsty that one often got them to drink plenty of fluid nourishment after it, which was an additional advantage. Hyoscin hydrobromate he had found excellent in doses varying from $\frac{1}{80}$ up to $\frac{1}{60}$ gr., and in one case which he related, when a dose of $\frac{1}{80}$ gr. was given, its beneficial results were very striking. Morphia, hypodermically, was uncertain, and the dose must be large to obtain good results. In one case he had given 1 gr. morph. hydrochlor. hypodermically before the patient was appreciably affected.

The CHAIRMAN (Dr. T. Drapes) said that all present must be interested in the question of hypnotics, as a selection of a suitable hypnotic was a matter which had to be decided daily.

Dr. DONELAN said he had a great deal of experience of the use of hypnotics in maniacal cases. He quite agreed with Dr. Rainsford that the combination of chloral, opium, and bromide cannot well be surpassed. Prolonged restlessness and sleeplessness seem to accentuate depressive delusions in melancholics. As regards veronal, he once had a case which gave him great anxiety, in which a moderate dose seemed to produce symptoms akin to suffocation; the patient recovered, but he had since discontinued its use. He believed veronal had a cumulative action, and he was averse to its habitual use in mental cases. He mentioned some interesting cases of poisoning by veronal taken habitually by persons suffering from the drug-habit.

Dr. O'NEILL said he had a long experience of chloral when he was an assistant at the Richmond Asylum. The dose given to excited patients was 30 gr. of chloral and 30 gr. of bromide of potash, combined with *Spts. Ammon. Aromat.*,

half at bedtime, and the remainder in three hours if necessary. He thought well of veronal, and he considered paraldehyde the most suitable of all hypnotics, especially if any cardiac trouble were present, its only objection being its odour and taste.

Dr. REDINGTON gave veronal frequently with excellent results, but, having seen the accounts of inquests upon some cases of poisoning by the drug, he had now discontinued its use. As regards suiphothal he had had a case in which, after a dose of 30 gr., ataxic symptoms were observed.

Dr. GREENE wished to say that when he was younger he had to work with a physician who was very fond of what he might call "grape shot" prescriptions; prescriptions containing many sedative drugs: opium, chloral, bromide, gelsemium, hyoscyamus, etc. He thought it was a matter of little importance in chronic cases what sedatives were selected, so long as they were safe and did not endanger life, but in acute cases the selection of a suitable hypnotic was all important. As a practical matter one was frequently obliged either to use hypnotics or to use mechanical restraint, and as no one wished to imitate those who have gone before us, and whose methods of treatment are now regarded as obsolete, they were inevitably led to use hypnotics in the treatment of excited cases. As regards their therapeutic action, other than as sedatives, they knew little. As regards veronal, they know it is a compound of urea, and they also know that some people were singularly affected by this substance; and having regard to the existence of idiosyncrasy and intolerance of urea compounds shown in some cases, they did not think they were justified in using veronal. Every practitioner knew all that is to be known of opium and its compounds and its therapeutic value. He had the greatest confidence in the combination known as the "three fifteens," viz.: 15 gr. Battley's solution, 15 gr. of bromide, and 15 gr. of hydrate of chloral. He believed no patient ever died from this combination and these doses. He believed it was perfectly safe in all cases, and no ill-results had ever occurred from its administration in his practice. None had hitherto spoken of hyoscin; he believed $\frac{1}{100}$ gr. given in cases of acute mania gave placid rest. No one needed to be afraid of the use of hyoscin properly given in suitable doses, and its advantage was markedly beneficial by the muscular rest it secured for the patient. Mechanical restraint he considered better than attendants, say, five or six, holding a patient, and in extreme cases of excitement the patient must be paralysed by drugs to ensure quiescence, the benefit of which was exceedingly doubtful.

Dr. GAVIN said he had but once to resort to mechanical restraint in the treatment of a case of insanity. This patient was attempting self-mutilation—pulling off his testicles. He found, however, that it was only necessary to get the patient up and dressed in his trousers, which took the place of mechanical restraint.

Dr. RAINSFORD asked Dr. Gavin if he had remarked in his experience that Irish patients were more acutely excited and maniacal than English or Scotch ones.

Dr. GAVIN replied that he found patients much less maniacal, and acute mania much less severe in character, in Ireland, than in England or Scotland.

Dr. DONELAN said that there were some cases where restraint might be justified, but that restraint demoralised the staff of any asylum, and had a tendency when once adopted to creep into an institution to its detriment.

Dr. EUSTACE said all were agreed as to the importance of the selection of a safe hypnotic, and thought well of small hypodermics of morphine. He had once given sulphonal in a 20 gr. dose through nasal tube in an obstinate case of recurrent melancholia. This patient collapsed and nearly died, and on the following day had hematoporphyrinuria, showing that some patients were singularly susceptible to the drug.

Dr. RUTHERFORD spoke favourably of paraldehyde, which produced sound sleep in most cases when given in doses ʒiiss to ʒij.

The CHAIRMAN (Dr. T. DRAPES) said he was glad to see that all the members present had spoken of their experiences of hypnotics, and the discussion had been useful and interesting. He spoke of the moral effect of modern asylum treatment, and said it largely did away with the necessity for mechanical restraint. He mentioned a case of self-mutilation of extreme gravity, in which occasional restraint was of undoubted benefit. Restraint was more largely used in old days probably for one reason, because physicians had not the choice of sedative drugs which we

have to-day. He next reviewed several drugs in use as hypnotics, and spoke highly of his experience of hyoscin. He had a sort of paternal interest in this drug, as he believed he was the first to use it, and recommend its employment, in Irish asylums. Dr. Daniel had read a paper at the annual meeting on the use of hyoscin, but in the cases described, rather heroic doses were used. He (Dr. Drapes) never gave more than $\frac{1}{100}$ gr. for an initial dose, and seldom over $\frac{1}{40}$ gr. at any time. Sulphonal he used frequently, and it had been a favourite remedy of Dr. Clouston, who thought it raised the spirits and promoted cheerfulness, in melancholics, and at Morningside many years ago it had even been described as "smiling powder" when given in such cases. This good result had not, so far as he was aware, been observed by others in similar cases. In his experience veronal did not produce unfavourable results. Luminal he had recently tried and found most efficacious. Omnopon he also found of use, and in his hands it had produced no unpleasant after-effects. He had, however, not made sufficient trial of it as yet to enable him to form a decided opinion as to its merits. The prolonged warm bath and wet-pack were amongst the most valuable adjuncts to sedative treatment. In conclusion, he said that papers read at their meetings upon research work, valuable as they were, could only be discussed by experts in research, but all could join in discussions upon clinical subjects, and he considered the Division owed much to Dr. Rainsford for having introduced this discussion, and he hoped others would bring forward subjects of clinical interest more frequently at their meetings.

Dr. RAINSFORD, in replying, spoke favourably of the administration of hyoscin in doses of $\frac{1}{80}$ gr. and mentioned a case when this treatment was eminently successful, and discussed the relative merits of trional and sulphonal as hypnotics; he thanked the meeting for the very kind way in which they had all joined in the discussion he had introduced.

Dr. GREENE having pointed out that owing to the war attendants had volunteered and gone to the front in the interests of the nation, and were thereby prevented from presenting themselves for the preliminary examination for the nursing certificate, requested the meeting to secure, if possible, that these attendants should be allowed their examination. After discussing this matter, the following resolution was proposed by Dr. ADRIAN GREENE, seconded by Dr. EUSTACE, and passed unanimously: "That we, the Irish Division of the Medico-Psychological Association, request the Educational Committee to recommend the Council in the case of those attendants who were attending the lectures being delivered to qualify them for entrance for the preliminary examination for the Medico-Psychological Association's Certificate, and who are at present serving in either the navy or the army, to sanction their being allowed the examination, provided that they be recommended for the privilege by their resident medical superintendent, and that they have served the necessary period of years in an asylum."

The Hon. Secretary was directed to forward the resolution without delay to the Hon. Secretary of the Educational Committee of the Association.

It was proposed by Dr. DONELAN, seconded by Dr. RAINSFORD, and passed unanimously: "That the best thanks of the Division be tendered to the President and Fellows of the Royal College of Physicians for the use of the rooms of the College for meetings of the Division."

A cordial vote of thanks to the Chairman terminated the proceedings.

LONDON COUNTY COUNCIL (1).

MENTAL DEFICIENCY ACT.

Mental Deficiency Act, 1913—Administrative Difficulties.

THE Mental Deficiency Act has now been in force for upwards of seven months, long enough to enable some conclusions to be drawn as to its value, and to indicate some of its difficulties. These latter are conspicuous, and we think the time has come when the more important difficulties with which the local authority is faced in discharging the duties placed upon it by the Act should be brought specifically to the Council's notice.

The earliest date allowed by the Act for the appointment by the Council of a Committee for the purposes of the Act, as required by Section 28, was 1st April, 1914, and there was therefore no period of anticipatory preparation possible, within which accommodation might have been secured, and other necessary administrative machinery might have been set up ready for the commencement of the Act. The Council began its work as the local authority under the new Act subject to considerable disadvantage in that it was faced with demands for action in a number of individual cases which called for prompt action, if any, while the means for handling cases, and even the principles upon which cases should be dealt with, were to a large extent absent or indeterminate. The Act left many vital points to be settled by regulations and rules which were not issued until dates subsequent to that upon which the Act came into force, and then only in a provisional form. The regulations made by the Board of Education have since been confirmed, but the important regulations made by the Home Secretary under the Act, which are essential to the administration of the Act, still remain provisional and subject to amendment. Upon some points which the Act leaves for definition by regulation, regulations have not yet been made, *e.g.*, the transfer and discharge of patients from institutions. It will be seen, therefore, that the Council's task has been, and continues to be, performed under difficulties occasioned by doubt as to how effect should be given to certain provisions of the Act, added to which are further difficulties due to the obscurity of the Act itself upon certain points. Nevertheless, much of the procedure necessary for the administration of the Act has been established, and work is being carried on as far as possible upon definite lines.

Cases which can be dealt with.

The Act strictly limits the cases which may be dealt with to four classes, *vis.*, idiots, imbeciles, feeble-minded persons and moral imbeciles, and the definition of each class which the Act gives provides that the particular degree of defectiveness specified must have existed from birth or from an early age. It has been found that this stringency of definition excludes from the operation of the Act many cases of which particulars are communicated in the expectation that they will be dealt with. But there is a further considerable limitation of the Council's powers over those cases which do come within the scope of the Act, for of such cases, apart from those notified by the local education authority, and those who have come within reach of the law in certain specified ways, the local authority has an obligatory duty to deal only with those who are found neglected, abandoned, or without visible means of support, or cruelly treated. The greatest difficulty has been found in many cases, which seemed to call for action by the local authority on all other grounds, in finding that there has been "neglect" or absence of "visible means of support" within the meaning of the Act. For instance, the parent of a defective child has given, and is prepared still to give to the child as long as it remains at home, the best care and attention in his power. The child does not lack food or clothing. At the same time the parent, who cannot afford to provide institution care at his own cost, feels that institution care is needed in the child's interests. Such a case seems to be one in which the local authority ought to act. The difficulty has been partly solved by concluding that the word "neglected" used in the Act must cover cases where, without wilful omission, the care and accommodation provided, which might be adequate for a normal person, are inadequate for one who is defective; in other words, that neglect may be constructive as well as positive. This has enabled action to be taken in a number of cases.

Ascertainment of Cases.

Information as to cases of alleged defect has been received from various sources. Parents and relatives of persons supposed to be defective have applied for advice or assistance; Poor Law officers have given notice of a few cases, and particulars of several have been communicated by charitable societies, and persons interested in the care of the feeble-minded. But the majority of the cases considered so far have been those notified by the local education authority for the reasons specified in Section 2 (2) or on other grounds, those of which notice has been received from the police, and those undergoing imprisonment, as to which two medical certificates

of defect have already been given to enable the Secretary of State, under Section 9, to order the transfer of the cases from prison to institutions for defectives, and as to which the Board of Control have made inquiry whether the local authority is prepared to deal with them, and as to their character, antecedents, and home surroundings.

The first duty of the local authority (Section 30a) is to "ascertain what persons within their area are defectives subject to be dealt with" under the Act otherwise than at the instance of a parent or guardian, that is (a) under an order made by a judicial authority upon a petition (Section 5) presented by a relative or friend or an authorised officer of the local authority, or (b) under an order of a court of competent criminal jurisdiction (Section 8), or (c) under an order of the Secretary of State (Section 9). The duty of ascertainment involves the medical examination of cases of which notice is received (but not, presumably, if they have already been certified for the purposes of an order under Section 9), and, if they are found to be defective within the meaning of the Act, further inquiry as to home circumstances, etc., to enable a decision to be made whether as defectives they are "subject to be dealt with." The provisional regulations issued by the Secretary of State deal at some length with the nature of inquiries which should be made, which are to extend to the family history, and are to be made under the directions of a medical officer. A register of cases "ascertained" has to be kept. We are appending to this report a statement of cases of which such information has been received, which shows that of these cases a large proportion has been found either to be not defective within the meaning of the Act, or, being defective, not subject to be dealt with under the Act. The duty of ascertainment is very important and really difficult, and it is not rendered easier by the fact that the local authority has been expressly warned by the Home Office that it has no right to institute "domiciliary visitations without the consent of the occupiers, or to carry out inquiries in other ways which might reasonably be regarded as inquisitorial and objectionable." Evidently, therefore, the local authority is expected to proceed with caution in the ascertainment of cases.

The duty of ascertainment alone, apart from other duties under the Act, imposes a considerable burden of detail work upon the staff at our central office, engaged primarily for lunacy work, and upon the staff in the public health department who are entrusted with duties under the Act, and the volume of work is greatly disproportionate to the number of cases which, in the result, have actually been dealt with.

Consent of the Parent necessary to an Order for a Defective to be dealt with.

In cases in which, after ascertainment, it has been decided that petitions for orders for detention in institutions shall be presented to a judicial authority, further difficulty may arise because the written consent of the parent or guardian has to be given to the making of an order, unless the judicial authority considers that the consent is unreasonably withheld. If consent is withheld the difficulty of determining whether there is neglect, already referred to, may be increased and it may not be possible to deal with some cases which in their own and the public interests probably should be dealt with. In the first case dealt with under the Act by petition the mother's consent was withheld, and the judicial authority, after very careful consideration, felt that he could not pronounce the withholding to be unreasonable. A second petition, however, was presented to another judicial authority, who took a different view, and an order for the defective to be sent to an institution was ultimately made.

Liability of Local Authority to take action.

There has been much difficulty in some cases in determining as to the liability of the Council or other local authority to take action. An order sending a defective to an institution, or placing him under guardianship at the cost of a local authority, has to specify the authority in question, which by Section 43 (1) is defined to be "the council of the county or county borough in which he resided." A question has been raised as to the meaning of the word "resided," because in the following Section 44, "place of residence" in case of doubt is construed to mean the county or county borough "in which the person would, if he were a pauper, be

deemed to have acquired a settlement within the meaning of the law relating to the relief of the poor." It seems open to doubt whether residence should in every case be determined on the strict law of settlement, or whether a wider and more general interpretation is to be placed upon the word "resided," leaving resort to Poor Law settlement only in cases where there is doubt as to place of residence in the ordinary non-technical acceptance of those words. Inquiry as to the settlement of every case which appears subject to be dealt with will increase enormously the work to be done under the Act. Reference to other local authorities has been made in some cases of which information has been given to the local authority for London. In the case of a girl brought before one of the Metropolitan police magistrates on a criminal charge, and dealt with by the magistrate as a defective, the question has been raised whether the Council should be held liable to deal with the defective, who appears to be settled in Kent. The magistrate, however, on the ground that the defective had committed her offence in London, and was homeless within the London area, held that the London County Council was *prima facie* responsible for the maintenance of the defective in an institution, and made an order sending the defective to a certified institution, leaving the Council to take steps within three months to secure the transfer of liability to another local authority.

Contributions to Expenses of Maintenance of Cases dealt with.

Where orders are made for cases to be dealt with at the Council's expense, inquiry has to be made as to the means of the parents or other relatives, and, wherever possible, arrangements for contribution by the relatives in relief of the Council's expense have been made. In some cases, judicial orders directing contribution have been obtained.

Accommodation.

Brief comment should be made here upon the steps which have been taken for the provision of accommodation for defectives by the Council. It has been felt that until the scope of the Act is somewhat more clearly ascertained, it would not be proper that the Council should embark upon the provision of specially-built institutions, but inquiry has been made as to properties which could be taken on lease, and adapted at small cost for temporary use. Many properties have been inspected, but few have appeared suitable for use as accommodation for cases of mental defect. The Council, however, has decided to purchase one property, the mission schools at Streatham, for use in the first instance for defective females of certain classes, and as a place of safety and receiving home to provide accommodation for some seventy cases. Another property is receiving consideration with a view to a lease, and we contemplate the use of the old industrial school at Brentwood, which is already the property of the Council, for male cases of defect. The only accommodation actually in use, so far, is what has been provided by means of arrangements with various voluntary agencies.

Cases of which Information is received from the Police.

Special difficulties have been experienced in connection with the procedure for dealing with cases of which information is received from the police, and cases in prison where action under Section 9 is proposed, and with cases between the ages of seven and sixteen.

Section 8 of the Act provides that on conviction of certain offences by a Court of Criminal Jurisdiction a person proved to be defective may be dealt with by the Court, which may direct that a petition may be presented for the case to be sent to an institution or placed under guardianship, or may itself make an order sending the case to an institution or placing it under guardianship. The Court has to be satisfied of the defect on medical evidence, and the section places upon the police the duty of bringing before the Court such evidence as may be available. The police, also, when it appears that a person charged with an offence is defective, have to communicate with the local authority, presumably in order that the local authority may "ascertain" the case, and may have an opportunity to make representations to the Court if it appears that the case is not subject to be dealt with at

its expense. Particulars of many cases of alleged defect have been received from the Metropolitan Police, and, except in a few instances, have been examined by the Council's medical officer as part of the duty of ascertainment, and in order to safeguard the Council's interests. Many of the cases have been found not to be defective within the meaning of the Act. The examination having been made, however, it is apparently expected that the Council's officer will assist the Court with evidence as to the mental condition, and the Board of Control have asked whether, in all cases where alleged defectives are charged with offences, the Council will be willing on application by the police to provide medical evidence. We have suggested that if this were agreed to the police should defray the expenses of the witnesses, but there seems to be difficulty as to this. The Board of Control, however, intimate that as "ascertainment" is an obligatory duty of the local authority, and the medical examination of cases of which notice is given by the police is a necessary part of this duty, they would be able to defray half the expenses of such examination. This question is still engaging attention. There is a further purely administrative difficulty to be borne in mind in this connection, occasioned by the burden of work which is likely to be imposed upon the Council's officers if they have to examine every case of alleged defect which comes before a "court of competent jurisdiction," and by the fact that cases not infrequently come before different courts at the same hour.

The cases of which information is received from the police are amongst the most difficult of those with which the Council is expected to deal, and the problem of finding suitable accommodation for such cases, in the absence of any provided specially by the Council, is at present acute. Many of these cases are habitual prostitutes, of whose moral improvement there seems small prospect, and practically all the accommodation for fallen defective women which is available under contract arrangements is confined to those of comparatively improvable mental type who are susceptible of moral benefit. Negotiations, however, are being pursued for accommodation for this particular class.

Defectives in Prison.

As regards defectives already in prison, who it is proposed shall be transferred to institutions for defectives by orders made by the Secretary of State under Section 9 of the Act, the procedure hitherto has been for the Board of Control to intimate to the Council that two medical certificates have been given upon which the Secretary of State is satisfied of the existence of defect within the meaning of the Act. Apparently, therefore, no further duty of "ascertainment" as to the existence of mental defect is expected of the local authority in these cases—in fact, this view has been expressed to the Board of Control by the Prison Commissioners—but the Board of Control inquire in each instance whether the local authority is prepared to provide for the defective under the Act, and if so in what manner, and ask for a report from the local authority as to "the character, antecedents, and home surroundings" of the defective to enable the Secretary of State to judge of the expediency of dealing with the case under the Act. Prosecution of inquiries upon these points involves a great deal of work and much time, for which there is little result to be shown. The Council has not at present accommodation suitable for these prison cases, though it has been found possible to send a few of the younger cases to accommodation available under contract, but for the great majority of cases the Council has been obliged to say it is unable to make any provision. For cases of dangerous or violent propensities the State is liable to provide accommodation, and of the cases as to which the Board of Control have made inquiry, some, at least, have appeared to be subjects for a State institution. Such an institution is understood to be in course of provision by the Board of Control, but has not yet been brought into use.

We have been informed that the Board of Control receive from the Home Office communications about a great number of defective prisoners concerning whom they are at present refraining from writing to the local authority, as they realise the difficulty occasioned, at present, by lack of accommodation. The need for providing for this class of case is, however, being urged, and apparently the prisons may be expected to be a source whence many cases subject to be dealt with at the Council's expense will come.

It has been stated that the Council is not expected to arrange for further medical examination of prisoners who have already been certified to the satisfaction of the Secretary of State to be defective. Inquiry, however, has to be made of some of these cases to ascertain what are their character and antecedents, and in the course of such inquiry, made by the Council's medical officer, the opinion sometimes has been formed that the case is not actually defective within the meaning of the Act. The question of the existence of defect "from birth or from an early age," already referred to, occasions great difficulty in these as in other cases. Doubtless, with time and wider knowledge, there will be established some common ground for decision upon this matter.

Defective Children.

Cases of mental defect between the ages of seven and sixteen present special difficulties of their own. The duty of "ascertainment" of all such cases, referred to in the Act as "defective children," is by Section 30 of the Act expressly removed from the local authority, and imposed upon the local education authority, which in London operates through the Council's Education Committee. It is enacted further that "the local authority shall have no duties as respects defective children except those whose names and addresses have been notified to them by the local education authority" under the provisions of the Act. Such notification is possible (Section 2 (2)) in the case of defective children: (i) who have been ascertained to be incapable, by reason of mental defect, of receiving benefit or further benefit in special schools or classes; (ii) who cannot be instructed in a special school or class without detriment to the interests of other children; (iii) as respects whom the Board of Education certify that there are special circumstances which render it desirable that they should be dealt with under the Act by way of supervision or guardianship; or (iv) who, on or before attaining the age of sixteen, are about to be withdrawn or discharged from a special school or class, and in whose case the local education authority is of opinion that it would be to their benefit that they should be sent to an institution or placed under guardianship. The "special school or class" referred to is a special school or class within the meaning of the Elementary Education (Defective and Epileptic Children) Act, 1899. The local education authority has communicated particulars of some cases of defective children who are undergoing detention at the Council's expense in industrial schools or reformatories (which are not "special schools or classes"), the term of detention being about to expire on the child reaching the age of sixteen, where it is thought desirable that there should be continued detention after the age of sixteen in an institution for defectives, and where the Secretary of State might make an order for transfer to such an institution under Section 9 of the Mental Deficiency Act. The Secretary of State's order could be made only while the case is undergoing detention, *i.e.*, before the child reaches the age of sixteen. The order, moreover, could be made only on an institution the managers of which are willing to receive the case, and in the absence of accommodation specially provided by the Council the managers of any other institution obviously would be willing to receive only those cases for which the Council would be willing to pay. But the local authority has no obligatory duty to perform with regard to a defective child under the Mental Deficiency Act unless the case has been "notified" by the local education authority, and notification, which can be made only on one or other of the grounds specified in Section 2 (2), as already quoted, has been found in some instances very difficult. As a result, some cases have passed the age of sixteen without an order having been made, and, having then been discharged from the industrial school or reformatory, it becomes impossible for the local authority to deal with the defectives unless they are found subject to be dealt with as neglected, abandoned, without visible means of support, cruelly treated, or again within reach of the law. This condition of affairs might, in many cases, lead to unfortunate results.

The difficulty which has been felt hitherto has lain in the fact that, as the local authority has no obligatory duty to perform with regard to defective children unless the children's cases have been notified, any action taken under voluntary powers (which exist) would have to be taken at the sole cost of the Council without aid from the Treasury grant, which is to be administered by the Board of Control since the Board have intimated that the grant will be applied to defray half the

cost of the performance by local authorities of those duties which are obligatory. It is now understood, however, that the Treasury grant may be applied to some extent to defray half the cost of the performance of voluntary duties in cases such as those now under discussion. We are awaiting further information from the Board of Control upon this matter, but in the meantime it may be pointed out that a means of escape possibly lies in this direction from the dilemma with which the education authority and the local authority have been faced in their joint desire to deal with certain cases where action is very necessary but far from easy.

(¹) Report (Abstract) of the Asylums and Mental Deficiency Committee submitted to and received by the Council on December 1st, 1914.

A HOMICIDAL ATTACK ON DR. HETHERINGTON, MEDICAL SUPERINTENDENT, DISTRICT LUNATIC ASYLUM, LONDON-DERRY.

At a special Court in the Boardroom of Derry Asylum, before Colonel Johnstone, R.M., a patient, named Thomas Baird, was charged by District Inspector M'Hugh with assaulting and stabbing Dr. Charles E. Hetherington, Resident Medical Superintendent, occasioning him grievous bodily harm.

Dr. Hetherington stated that while returning on the afternoon of November 3rd from the female department to the office he met defendant in the passage. When witness was passing he said something about getting out, and witness replied it would be all right. Witness proceeded, but observed defendant, who was then behind, raising his hand. Witness caught defendant's hand. They had a struggle, and witness felt him cutting his throat. They both struggled out to the yard, defendant still cutting at witness's throat. Witness called for help, and an attendant came to his assistance. Witness did not remember getting free from defendant, but he remembered returning to the passage holding his neck, which was bleeding badly. Dr. Watson, who was then called, attended to witness's wounds. Witness did not see anything in defendant's hands.

Michael M'Laughlin, an attendant, stated that he saw the doctor and defendant struggling on the ground, and went to the doctor's assistance. Witness pulled defendant away from the doctor, who was underneath. Defendant was striking at the doctor's neck and face, and, as witness went forward, he observed him throw away something like a cutter-knife. When the doctor was being taken away defendant then tried to kick him.

James M'Laughlin, the head attendant, said accused, who had been in his charge prior to the attack, had gone down the passage to wait on other patients going to dinner. Witness went to fetch a patient whom Dr. Hetherington wanted to see, and on returning, his attention was attracted by the struggle between the doctor and the patient in the yard. Witness assisted the other attendant in freeing the doctor, and afterwards found the knife, which Baird had thrown away.

Dr. Watson, Senior Medical Assistant, said after the attack Dr. Hetherington was brought to him bleeding profusely. Describing the doctor's injuries, witness said there were two incised wounds on the right side of the throat about an inch long, and on the right lower jaw there was an incised wound about two inches long. This cut was through the facial artery, and caused most of the bleeding. On the left side there was an incised wound about two inches long, running parallel to the lower jaw. There were several smaller abrasions about the temples, and the collar and necktie which the doctor was wearing were cut in several places. On the middle and ring fingers of the right hand there were incised wounds, and also incised wounds on both wrists and in the middle of the left hand. The doctor was suffering very much from shock, and witness would say that his life was in danger. The wounds described could have been caused by the instrument produced. Accused had been a patient in the institution for four years.

The R.M. returned accused for trial at the Assizes.—*Belfast Evening Telegraph*, November 26th, 1914.

At the Assizes, the jury found that the prisoner was insane, and he was ordered to be detained during the Lord Lieutenant's pleasure.

LIBRARY OF THE MEDICO-PSYCHOLOGICAL ASSOCIATION.

THE Library is open daily for reading and for the purpose of borrowing books. Books may also be borrowed by post provided that at the time of application three-pence in stamps is forwarded to defray the cost of postage. Arrangements have been made with Mr. H. K. Lewis to enable the Association to obtain books from the lending library of that firm should any desired book not be in the Association's Library.

The Library subscribes to the following journals:

Journal of Abnormal Psychology.
Journal of Nervous and Mental Diseases.
American Journal of Insanity.
Journal de Psychologie Normale et Pathologique.
Zeitschrift für die gesamte Neurologie und Psychiatrie.
Psychoanalytic Review.
Review of Neurology and Psychiatry.

The following books have recently been added to the Library:

Psychoanalysis.—Brill.
Outlines of Psychiatry.—W. A. White.
Dementia Præcox.—Meyer and Jelliffe.
Three Contributions to Sexual Theory.—Freud. (Translation by Brill.)
Histological Studies on the Localisation of Cerebral Function.—Campbell.
The Integrative Action of the Nervous System.—Sherrington.
The Psycho-Pathology of Everyday Life.—Freud. (Translation by Brill.)
Fifty-sixth Annual Report of the Commissioners in Lunacy for Scotland.

Members are reminded that they are entitled to receive any of the journals by post in accordance with the Library Committee's scheme of distribution. Members wishing to avail themselves of this scheme should communicate with the Secretary, specifying the journal or journals which they require.

The Secretary would be glad to receive from members suggestions as to books suitable for addition to the Library.

Applications for books should be addressed to the Resident Librarian, Medico-Psychological Association, 11, Chandos Street, Cavendish Square, W. Other communications should be addressed to under-mentioned at Long Grove Asylum, Epsom, Surrey.

EDWARD MAPOTHER,
 Hon. Sec. Library Committee.

OBITUARY.

DR. HAROLD BAILEY SHAW.

We regret to have to record the death of Dr. H. B. Shaw, who was for many years Medical Superintendent of the Isle of Wight Co. Asylum, and a respected member of the Association since 1891.

The deceased gentleman was the son of the late Dr. William Shaw, of Hampstead, London. He was educated at Epsom and Sidney College, Cambridge. He graduated in arts at Cambridge, taking First Class Honours in the Natural Science Tripos of 1880. He became M.B., B.C. in 1884, and D.P.H. in 1890, at the same University.

His first years were devoted to physiology, physics, and organic chemistry at Charing Cross Hospital School. He was then Medical Officer, Smallpox Camp, Darenth, and Resident Clinical Assistant at Winson Green Asylum, Birmingham. For two years he was Assistant Medical Officer at Gloucester Co. Asylum, leaving there for the Hampshire Co. Asylum, where he remained for six years as senior.

When the Isle of Wight Asylum was opened he became its first medical superintendent, which position he occupied for eighteen years—until his death.

On the last day of a fortnight's holiday he was taking at Bournemouth he had an attack of cerebral hæmorrhage, from which he succumbed within a few hours on September 28th, 1914.

He was fifty-six years of age and was entitled to take his pension from last November. He was buried at Gatcombe Church near the Asylum on October 2nd, 1914.

DR. SIDNEY NELSON CROWTHER.

We regret to report the death of Sidney Nelson Crowther, Senior Assistant and Superintendent-Elect of the Surrey County Asylum, Netherne, killed in action whilst carrying despatches near Armentières on October 18th. Dr. Crowther received his medical education at the Westminster Hospital, becoming M.R.C.S.Eng. and L.R.C.P.Lond. in 1903. He took up asylum work at Brookwood, and on the completion of the new asylum at Netherne he was transferred there as Senior Assistant Medical Officer.

He was a brave gentleman, and a thorough sportsman in the best sense of the word, and possessed a strong and charming personality which endeared him to all who knew him.

He served in the South African War as dresser, and at the outbreak of the present campaign sought his Committee's sanction to volunteer again, this time as a motor despatch rider. The spirit of patriotism prompted this, notwithstanding the fact that he had just been appointed successor to the retiring Superintendent, whom he persuaded to continue in office until his return from service in H.M. Forces.

He will be greatly missed by a wide circle of friends, especially those at Netherne, where his popularity amongst patients and staff was unbounded.

On November 11th, a memorial service was held at the Asylum Chapel, Netherne. The Rev. F. H. Roberts, the Asylum Chaplain, officiated, together with the Rev. E. Bingham. The service was widely attended. The official account of Dr. Crowther's death is as follows:

"Information supplied by Officer Commanding Second Signal Troop as to death of S. N. Crowther.

"The deceased was killed by shell fire whilst taking a despatch at Le Piniert, east of Armentières. He was buried in a garden of a small cottage in the above-named place, and at the first opportunity it is intended to place a cross over his grave, bearing the inscription: 'In loving memory of Corporal Crowther, Royal Engineers. Died 18th October, 1914. R.I.P.'"

DR. ROBERT REID ALEXANDER.

It is with the deepest regret that we have to record the death, suddenly from heart disease, of Dr. Alexander, late of Hanwell Asylum, on November 14th, 1914. The deceased gentleman was born in Aberdeen, and received his medical education at the Aberdeen University, where he graduated M.B., C.M., in 1869, taking his M.D. in 1878.

His asylum career commenced at the Aberdeen Royal Asylum, where he was an Assistant Medical Officer, and from whence he occupied a similar position at the Bucks County Asylum. In 1873 he joined the medical staff of the Middlesex County Asylum, Hanwell. From the position of Assistant Medical Officer he became, in 1888, Medical Superintendent of the Male Department, and finally, on the abolition of the dual control at the end of 1891, sole Medical Superintendent. He was transferred to the London County service upon the London County Council taking over Hanwell Asylum in April, 1889. He retired in 1905, after thirty-two years' service, and was granted by the Asylums Committee a maximum retiring allowance.

His disposition was of the kindest and most sympathetic imaginable, and he was always eager to befriend the friendless and help those in need. He was a broad-minded man, who never shirked his responsibility, and was courageous to a degree.

His memory for faces and names was remarkable, and he always had a personal knowledge of every patient resident, by all of whom he was held in high respect and affection. He was an indefatigable worker—toiled early and late, and seemed to be able to do almost without sleep.

He was a good French scholar, and later, after retirement, Esperanto became an all absorbing pursuit which he could speak fluently, and as a labour of love translated into that language part of the New Testament. He also interested himself in Braille work for the blind.

At Hanwell, an institution teeming with great traditions and memories of the past, he was actively associated with most of the stages of its evolution to its present position of eminence.

His passing away will call to the minds of his numerous past colleagues and friends many treasured recollections, and in the halls and courts of old Hanwell, where his life was spent unselfishly and ungrudgingly in the service of others, the memory of his genial and commanding presence and strong individuality will never fade.

At the funeral, which took place quietly on November 18th at Golders Green Crematorium, the London County Asylums Committee was represented by its clerk, Mr. H. F. Keene, and Hanwell Asylum by Dr. Daniel, Mr. Martin, engineer, and others.

"Night brings out stars as sorrows show us truth."

DR. EDWARD CHARLES SPITZKA.

By the death of Dr. Edward Charles Spitzka, medical science has lost one of its most brilliant votaries, and the New York Neurological Society one of its oldest and most productive members.

He was born in New York City on November 10th, 1852. His father, a man of broad attainments and large reading, was early involved in the Revolution in Germany in 1848, whose cause he actively espoused, and on account of which he emigrated to America. Shortly after his arrival with his wife, the son was born. The parents sent their boy to the New York public schools, No. 35, whose "principal" was the well-known Thomas Hunter.

The son made rapid strides in his studies, and at a very early age entered the College of the City of New York. He soon evinced a definite preference for the natural sciences, and became especially interested in the subjects of biology, geology, and palæontology. These studies so fascinated him that he determined to take up the study of medicine, and became a student in the medical department of the University of the City of New York. Even while pursuing his medical studies he kept up his reading in the subjects previously mentioned.

After his graduation from medical school he proceeded to Germany, and settled in Leipsic. There he came under the influence of Wagner, von Coccius, His, Wunderlich, and Thiersch. After leaving Leipsic, he went to Vienna, where he met the man who had the greatest influence in determining his future career, namely, Meynert, under whom he accumulated a wealth of anatomical, physiological, and pathological knowledge which became the foundation of the most of his subsequent claims to fame. In some respects Spitzka resembled his great teacher and master, Meynert, especially in the possession of a vast fund of general information, and particularly in a thorough acquaintance with the facts of comparative anatomy. While in Vienna he also became interested in the subject of embryology, human and comparative, whose study he followed under Professor Schenk, who appointed him, with the consent of the authorities of the university, an assistant to the chair of embryology. Spitzka remained abroad altogether three years, after which he returned to the city of his birth.

Shortly after his return in 1876, he began the collection of whatever neurologic pathologic and anatomical material he could obtain, chiefly from the public and the private asylums of the city and its environs, and commenced his anatomical, neurological, and psychiatric investigations.

His was a dominating, overpowering personality. Endowed by nature with an unusual capacity for work, gifted with the most extraordinary powers of analysis, possessing a memory so retentive that it seemed almost supernatural, and withal, a fluency of thought and facility of speech, he was equipped with advantages whose like is seldom possessed by any single individual. To these attributes was brought an exceptionally creative and vivid imagination, which suggested and initiated a great deal of the work of his active mind. His facility in writing even eclipsed the ease and fluency of his speech.

He was a seeker after truth, and content with investigations only after they had satisfied all of the requirements of established facts, logic, and pure reason.

He was interested in many fields of human thought and knowledge, and generously contributed to both. Nobody except those who had been intimate with him could realise the extent and breadth of this knowledge. Possessing the use of many languages, thoroughly acquainted with history, knowing the literature of the people whose language he spoke, expert in all the branches of biological

science, he was easily one of the most versatile members of the medical profession.

This versatility shows itself in his writings, which embrace the departments of history, biology, palæontology, criminology, forensic medicine, and neurology, including neuro-anatomy, neuro-physiology, neuro-pathology, and psychiatry.

His work will be judged by medical men chiefly on account of his contributions to the last-mentioned subjects. These contributions to medical sciences were very numerous, many containing original discoveries and new view-points. His published writings in these subjects alone numbered over two hundred. These embody many entirely new discoveries and original points of view that made the sciences of neurology and psychiatry distinctly the gainer.

In neuro-anatomy, his name will be perpetuated by his discoveries, and it will live as long as the science. He was also the first to introduce into America an adequate conception of the scope of a true psychiatric science. Up to that time the study of mental disease in this country was based on an empirical foundation for the most part; the pathological basis of the subject was but imperfectly known or even studied in general. It was to his influence that the more serious study of the subject was taken up. It did not take long before his reputation became a national one, due in some measure to the fact that the trial of the assassin of President Garfield was then imminent. There was an almost universal cry for the sacrifice of the assassin, Guiteau. Spitzka, with a courage which was the result of a nature which could not tolerate falsehood, and convinced of the fact that the murder was the work of an insane man, did not hesitate to give his testimony to that effect. This event in his early life—he was at that time only twenty-nine years old—is mentioned, because it indicates the most dominant characteristic in his organisation, viz., the desire for truth, no matter what the consequences. One can imagine the courage he possessed, when one becomes acquainted with the fact that his life was threatened, that he received letters warning him that if he gave testimony to the effect that Guiteau was insane his own life would be sacrificed.

The great influence which he exercised in the field of psychiatry was best shown in his book, a *Manual of Insanity*, which went through two editions. The book embodied the study of all the large amount of pathological material which he had collected. Part of this had been previously used by him in the preparation of an essay, which had earned for him the W. and S. Tuke Prize, given through the British Medico-Psychological Association, and which had been open to international competition. This essay was entitled "The Somatic Ætiology of Insanity."—(Abstract from an appreciation by Dr. N. E. Brill before the New York Neurological Society, April 7th, 1914, *Journ. Nerv. and Ment. Dis.*, August, 1914).

NOTICES BY THE REGISTRAR.

DATES OF EXAMINATIONS.

Certificate in Psychological Medicine and Gaskell Prize.—July, 1915.
Nursing Certificate.

Preliminary examination Monday, May 3rd.

Final examination Monday, May 10th.

Schedules for the Nursing Certificate examinations can be obtained from the Registrar and must be returned to him duly completed *not less than four weeks* prior to the date of examination.

Essays for the Bronze Medal should reach the Registrar on or before June 14th.

Papers for competition for Divisional Prizes should reach the Registrar on or before June 1st.

Full particulars of all examinations can be obtained from the Registrar, Dr. Alfred Miller, Hatton Asylum, Warwick.

NOTICE OF MEETINGS.

Quarterly Meeting, May 18th, 1915, London.

South-Eastern Division.—April 29th, 1915, Newlands House.

South-Western Division.—April 22nd, 1915.

Northern and Midlands Division.—April , 1915, Harrogate.

Scottish Division.—March 19th, 1915.

Irish Division.—April 15th and July 1st, 1915.

APPOINTMENTS.

Bartlett, George Norton, M.B., B.S.Lond., M.R.C.S., L.R.C.P., Medical Superintendent at the Exeter City Asylum.

Coombes, Perceval Charles, M.R.C.S., L.R.C.P.Lond., Medical Superintendent, Surrey County Asylum, Netherne.

Cormac, H. Dove, M.B., M.S.Madras, Medical Superintendent of the Cheshire County Asylum, Macclesfield.

Ferguson, J. J. Harrower, M.B., Ch.B.Edin., Medical Superintendent at Fife and Kinross Asylum, Springfield.

Lewis, Edward, L.R.C.P.&S.Edin., L.R.F.P.S.Glasg., Medical Officer under the Mental Deficiency Act to the Glamorganshire County Council.

Moon, G. B., L.R.C.P.&S.Edin., L.R.F.P.S.Glasg., Second Assistant Medical Officer at the Surrey County Asylum, Netherne.

Peachell, George Ernest, M.D., B.S.Lond., M.R.C.S., L.R.C.P.Lond., Medical Superintendent, Isle of Wight Asylum.

Rivers, William Gregory, M.B., Ch.B.Edin., Senior Medical Officer and Deputy Medical Superintendent to the Cornwall County Asylum, Bodmin.

Walford, Harold R. S., M.R.C.S., L.R.C.P., Second Medical Officer, Kent County Asylum, Barming, Maidstone.

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VOL. LXI.

Part I.—Original Articles.

The Diagnosis and Treatment of Parenchymatous Syphilis.⁽¹⁾ By F. W. MOTT, M.D.Lond., LL.D.Edin., F.R.S., Pathologist to the London County Asylums.

GENTLEMEN,—It is customary for the President of a Section to open the proceedings by an address, but I feel that it would serve a more useful purpose if I opened the discussion on the diagnosis and treatment of parenchymatous syphilis by giving an account of the observations which I have been making regarding the microscopic and bio-chemical pathology of tabes and general paralysis; for it is by an understanding of the pathological processes underlying these diseases that we are able to make a correct diagnosis, and prevent their occurrence or arrest their progress. My personal experience of the effect of treatment is somewhat limited as compared with that of many of those who are to take part in the discussion, and therefore I shall especially devote my attention to the observations which have been made in the Pathological Laboratory of the London County Asylums.

The Discovery of the Spirochaetes in the Brain.

The discovery of the spirochaete in the brains in twelve cases out of seventy by Moore and Noguchi, confirmed by further

observations and by other workers, has not only forged the last link in the chain of evidence necessary to show that syphilis is the essential cause of general paralysis and tabes, but it has made it necessary to regard the pathology of these diseases in a new light, and in future to speak of them as "parenchymatous syphilis." Noguchi later examined 200 brains from cases dying from general paralysis, and twelve spinal cords from tabes dorsalis. He has obtained positive results in 25 *per cent.* of the cases of general paralysis, whilst only one of the twelve cases of tabes gave a positive result. He regards general paralysis as a chronic parenchymatous encephalitis.

Soon after Noguchi published his paper a number of observers—Berl, Jakob, Levy, Marinesco and Minea, Marie, Levaditi and Banchowski, Mott, Ranke, Schmorl, Versé—confirmed the existence of spirochætes in the brains of paralytics. Very soon Förster and Tomaszewski, followed by Noguchi, demonstrated the presence of spirochætes in small cylinders of brain removed during life by the Neisser-Pollak puncture method.

The Existence of the Spirochætes in the Central Nervous System in Relation to the Pathology of Parenchymatous Syphilis.

I have examined now a series of 100 brains of patients who during life presented the clinical symptoms and signs of general paralysis, and in 66 *per cent.* of the cases spirochætes have been found by examination with dark-ground illumination, confirmed by staining films by the Fontana silver method. If the film be fixed by the same method the spirochætes can be readily stained by methyl violet, polychrome blue, or by Giemsa method. Förster and Tomaszewski say they find difficulty in staining by Giemsa. It is impossible to examine the whole of the cortex in a search for foci of spirochætes, and naturally the question arose whether clinical or pathological indications would afford a clue to the most likely situations to find the organism in a series of brains. There is first the probability of association of active multiplication of the specific organism with production of toxins and the onset of seizures. If the seizures are unilateral it is probable the poison is being produced in the hemisphere opposite to the side on which the epileptiform convulsions are occurring. Next it occurred to

me that the most likely situations to find the spirochætes would be those regions which show the earliest naked eye evidence of the disease, namely, the pole and mesial surface of the frontal lobe, and the frontal end of the limbic lobe ; these are regions where congestive venous stasis and adherence of the leptomeninges are first apparent. It was soon found that by far the most satisfactory method, both for rapidity and certainty of demonstrating the existence of spirochætes, was to make an emulsion from the cortex of the brain, from the regions mentioned, by rubbing up in a glass mortar a little scraping of the grey matter with normal saline or Ringer's fluid, and then examining with the dark ground illumination. The spirochætes can easily be seen on the dark ground ; and in a number of instances where the brain was removed soon after death more or less active movement could be observed. Cases with marked cortical wasting, according to our experience, yielded far less satisfactory results than recent cases, with little apparent cortical wasting. Sometimes the organisms were found in a quarter of an hour, sometimes only after a day's search. They seem to be present only in small foci, for not infrequently a spot a few millimetres away from that in which the organism had been found would yield negative results. The great difficulty of this investigation is that the search for the organism is like looking for the proverbial needle in the haystack ; not finding does not imply non-existence. We have never been able to find the spirochætes once in brains of patients dying with other forms of insanity. Very often a preparation of brain emulsion showing spirochætes has been sealed round with paraffin, and kept for days and observed at intervals ; numbers of other micro-organisms have been found, but the spirochætes can still be seen. Förster and Tomaszewski found spirochætes twenty-seven times in sixty-one cases examined by Neisser-Pollak puncture. In eleven the spirochætes were as abundant as in primary syphilis or congenital syphilitic lesions. In sixteen cases they had to seek for hours and make many preparations. I have had a similar experience in the examination of brains obtained *post mortem*. Their experience does not quite accord with mine, for they remark that in simple demential forms spirochætes are as numerous as in cases where convulsive seizures have occurred.

Experimental Observations.

Noguchi inoculated into the testicles of thirty-six rabbits the emulsion of six different specimens of brains of general paralytics in the fresh state. At the end of ninety-seven days in one case, and 102 days in the other, a small but typical induration of the testicle and scrotal skin occurred. In the first case the spirochætes were few; in the second they were abundant. Steiner claims to have produced in rabbits experimental syphilis of the nervous system by using albinos, and by sensitising the animals with several intravenous injections of spirochætal testicular emulsion.

It is interesting to note how slow was the development, as compared with the transmission by infection, made with material obtained from a chancre, secondary lesion, or even a gumma; in the latter case the lesions appear after an interval of four to six weeks—rarely two months elapse. Dr. Topley, aided by a grant from the British Medical Association, endeavoured at my suggestion to produce lesions in monkeys by injection of emulsions of brain material in which I had found spirochætes. His efforts to produce infection were unsuccessful, whether the material was injected into the brain or into the testicle. After the publication of the important results to be now described further research was abandoned.

Förster and Tomaszewski commenced their experiments in June, 1913, so that they have been in progress nine months, yet the results have so far been negative. Seeing that these observers have used material obtained from brains during life, and have exercised great precautions in their experiments, the results obtained, although negative, are of very great importance and value. Briefly stated, their experiments were the following: Puncture material from brains of 53 paralytics were inoculated into the testes of 60 rabbits, and 15 of these animals lived over two months without any signs. It may be remarked that Noguchi's rabbits did not develop any signs in the testes for 98 days, so that their results do not prove much. Of 13 apes, however, inoculated in the eyelid with material proved to contain spirochætes, 5 died 61, 82, 86, 88, and 90 days after inoculation, but 7 have been over four months under observation. Small nodules in the lids have been observed in some of these animals four to five weeks after

inoculation, but most careful research of a serous exudate obtained from the lesion showed no spirochætes. Intracerebral inoculation was also unsuccessful. Observations were made upon 40 rabbits and 17 apes for over four months. The failure to infect monkeys with this material containing abundance of active spirochætes is remarkable when we consider that material of tertiary syphilis, in which it is difficult to find spirochætes, when inoculated usually produces infection.

Evidence in Favour of a Biological Change in the Spirochætes.

It may be assumed, therefore, that this evidence favours the view that there may be a biological difference between the spirochætes of general paralysis and tabes and those of primary syphilis. The successful inoculation experiments of Noguchi, Berger, and Steiner with a long incubation period supports this conclusion. No one has been inoculated by handling brain material of general paralysis, and the unsuccessful attempts to infect monkeys, even when the material has been obtained from the living body and immediately introduced into the body of the animal, shows that the organism has undergone a biological change. "Still it is unexplained when, where, and how this change has come to pass." The cause of the long incubation period, the typical course, and the peculiar characteristic pathological anatomy of this disease in relation to the spirochætal infection, therefore, is of fundamental importance in the study of syphilis of the nervous system in relation to prevention and treatment. The biological change may be considered from several points of view.

(1) The spirochætes that cause the primary lesion are biologically modified. They may have been attenuated in their virulence by the widespread use of mercury; if this hypothesis be accepted, they may be spoken of as mercury-fast organisms which have acquired a resistance by natural selection, either by the acquirement of a habit of secreting themselves in the central nervous system, where metallic poisons such as arsenic, antimony, and mercury do not penetrate, or the attenuation has been effected by a diminished chemiotropism to these poisons.

(2) It is not the spirochætes that have changed, but the fluids and tissues of the body. The charts of conceptions of mothers of sixty cases of juvenile general paralytics show that

following miscarriages, abortions, stillbirths, and deaths in early infancy are children, who, at puberty, or in early adolescence, develop general paralysis. One half of these paralytic children had signs on the body of congenital syphilis; the remainder of the sixty had no definite signs, although the history of the fate of conceptions was conclusive evidence of infection of the mother. In the greater number of cases the mothers were unaware of the fact that they had had syphilis.

These facts seem to show that antibodies are being continually formed in the body of the mother which kill off the organisms as fast as fresh broods are formed; but with each development of spirolytic antibodies the organism is modified as regards virulence, so that the tissues of the living offspring are eventually able to cope with the disease by the same process of production of antibodies and spirillolysis. It may chance, however, as fresh bodies are formed, that some of the organisms get lodged in the central nervous system and penetrate the parenchyma; it is true that they may be weakened and attenuated organisms, but under normal conditions they would find a safe resting-place there, because the cerebro-spinal fluid which irrigates the whole substance of the central nervous system contains no leucocytes or bactericidal substances. Just as the pneumococcus or tubercle bacillus may remain quiescent in the body until some depressing or devitalising condition arises when they take on active growth, so it is possible that the spirochæte, or a granule antecedent form, may remain latent for many years in the central nervous system before taking on active development and killing its host.

The Existence of Spirochætes in Parenchyma of the Central Nervous System in relation to the Morbid Histological Changes.

It must be admitted that it is the toxins produced by the multiplication of the organisms which produce the inflammatory parenchymatous reactions of the tissues. In general paralysis there is a chronic meningo-encephalitis, but the whole cerebro-spinal axis suffers in some degree sooner or later, whereas in tabes dorsalis this is an elective action, and the disease is limited to histological changes affecting the posterior spinal protoneurons.

The experimental observations of Orr and Rows show that

toxins generated outside the spinal canal can pass up the nerves, and cause degeneration of the posterior columns only. This is the course of the lymph stream. Ehrmann found spirochætes in the nerve bundles near the primary sore; they were lying in the lymph spaces of the perineurium and endoneurium. It is probable, therefore, that infection of the central nervous system may occur by the lymphatics of the nerves. It may also occur by the perivascular lymphatics. We have no evidence to show that the spirochæte is in the posterior spinal ganglia, and the one case out of twelve of Noguchi's in which he found the organism in the spinal medulla may have been a case of tabo-paralysis. Moreover, it is difficult to believe that the spirochætes in tabes exist in the spinal medulla in all cases, as is the case, in all probability, in the brain of the paralytic. If the spirochæte were present in the medulla in tabes we should expect a more generalised reaction in the medulla, as it is unlikely that an organism with independent movement would not penetrate the grey matter and give rise to a myelitis, as we know it does in general paralysis where there is a general diffuse encephalitis. Now this difference in the pathogenesis of the two diseases is of very considerable importance, not only in regard to the comparative pathology of the two diseases, but also in regard to the explanation of the fact that treatment in tabes is satisfactory in many cases, whereas in general paralysis it is altogether unsatisfactory.

The more rapid destruction of the nervous elements in general paralysis may be correlated with the constant presence of the organism in the central nervous system, and the generalised effect of the virus on the whole central nervous system, especially the brain. What part does this virus play in the production of the characteristic perivascular infiltrations with lymphocytes and plasma cells also of the neuroglia proliferation? Similar perivascular appearances and neuroglia proliferation occur in gummatous brain syphilis, general paralysis, and in sleeping sickness. In gummatous brain syphilis, whether localised or diffuse, although there may be profound vascular changes causing interference with the blood supply, yet there is not the profound general wasting of the nervous system, and of the cortex cerebri in particular, as occurs in all cases of advanced general paralysis, the wasting being in direct proportion to the decay and destruction of nerve-cell and fibre systems. In sleeping sick-

ness, where the perivascular infiltration and neuroglia proliferation are as marked as in advanced general paralysis, we do not find a proportional wasting of substance, and neuronie decay and destruction.

The Biological Nature of the Spirochæta Pallida.

The similarity of the lesions produced by trypanosome infections to those of syphilis was used as one argument among others in favour of the *Spirochæta pallida* being a protozoon. However, there is a tendency now for biologists, and others who have studied the question, to regard spirochætes as more akin to bacteria than protozoa. Mr. Clifford Dobell, of the Imperial College of Science, who has long studied the biology of spirochætes, has come to this opinion. He does not think it is proved that they multiply by longitudinal division, neither does he think there is reliable evidence of the existence of a spore form. Meyrowski claims to have observed true lateral branches of the spirochætes in tissues, and in cultures which offer to him the best proof of their plant-like nature, and he gives photographs of the same. Many of the appearances he describes are similar to those which I have seen in emulsions of the brain in general paralysis, but which Mr. Dobell considers as artefacts of degenerative forms. Meyrowski denies the possibility of these being involutinal forms. I think the argument that the tissue reaction corresponds in trypanosome disease and syphilis is not valid, because the tubercle bacillus causes endothelial and lymphocyte proliferation. The malarial parasite, which is a protozoon, lives in the blood circulation, and gives rise to no such chronic lymphatic reactions as syphilis, neither do trypanosome infections while the organism exists only in the blood stream. It is remarkable that in spite of the fact that the brain harbours the spirochætes in all cases of general paralysis, the lymph glands in the neck are apparently not affected; the only tissue that shows a fairly frequent definite syphilitic lesion is the aorta, and definite nodular fibrosis I found to occur in 40 *per cent.* of 400 male paralytics; this lesion of the aorta occurs as frequently in tabes dorsalis, and possibly this may be a source of infection of the perivascular lymph channels of the posterior columns of the spinal medulla in tabes.

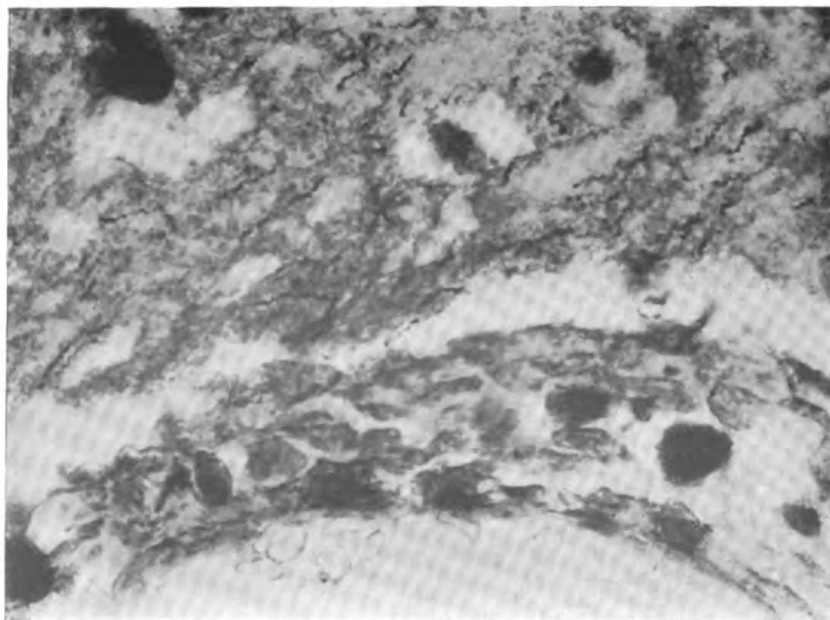


FIG. 1.—Photo-micrograph of the brain of a case of acute general paralysis stained by a modified Noguchi silver method. Abundance of spirochaetes are seen in the neighbourhood of a small vessel, the sheath of which shows cellular proliferation. Between these cells are many spirochaetes undergoing plasmolysis, and the cells are black on account of their being filled with the granular products of the degenerated spirochaetes. To the inside of this is seen the lumen of the vessel containing the unstained blood corpuscles. $\times 1450$.

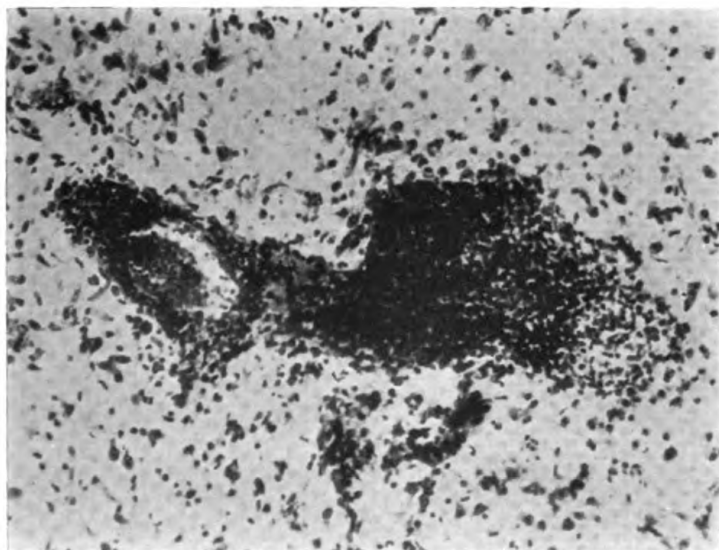


FIG. 2.—A section of the same brain stained by polychrome blue, showing intense perivascular infiltration; the lumen of the vessels is seen, but so intense is the reaction of the sheath cells that a little nodule is formed at the other end, obliterating or obscuring the lumen entirely. $\times 190$.

To illustrate paper by Dr. MOTT.

Adlard & Son, Imps.

The microscopic examination of brains of cases of paralysis in which a great abundance of spirochætes was found invariably exhibited changes indicative of a severe meningo-encephalitis ; the intensity of the inflammatory process was much more marked than naked-eye inspection would suggest. Generally speaking, the perivascular infiltration with lymphocytes and plasma cells, the capillary endothelial, and the neuroglial proliferation, together with the venous and capillary stasis, were most marked in those regions (namely, the frontal and limbic lobes) where the spirochætes were most readily and abundantly found. I have found the spirochætes in all regions of the brain cortex, once in the white matter, and once in the grey matter of the third ventricle.

The Microscopic Changes in the Cortex in Relation to the Spirochæta Colonisation.

My examinations of the brains by sections stained by silver methods have been attended with unsatisfactory results, except in the case of an early acute case of general paralysis. Small portions of the frontal lobe of this brain, which had yielded very satisfactory results by the emulsion method, were stained by a modified silver Noguchi method, which, by good fortune, deposited the silver on the spirochætes without staining the neuro-fibrils. Microscopic examination of these sections yielded some interesting results.

Contrary to the experience of Noguchi, but corresponding with that of A. Marie, these sections showed the existence of a feltwork of spirochætes around an inflamed vessel. Further examination of sections of this tissue led me to correlate the perivascular cell reaction with the presence of the spirochætes ; for in this section other vessels could be seen congested, in which, however, there was no perivascular infiltration. Careful microscopic investigation of the proliferated cells of the sheath of a vessel showed lying on and between them spirochætes, and in the interior of the cells were granules, the products of degenerated spirochætes (see Fig. 1). Some distance away from the perivascular focus where the spirochætes were seen, branches of this vessel may be observed in which there are proliferated sheath cells containing granules. Again, little nodules about a millimetre in diameter may be found consisting of phagocytic

cells, probably reticulo-endothelial cells (histiocytes), filled with granules—products of degeneration of spirochætes—some of which retaining their spiral form, others undergoing granular degeneration, can be seen lying amidst the cells (see Figs. 2 and 3). It is probable that the cells produce a spirillolytic substance which causes the granular spirochætal plasmolysis. This inflammatory reaction to the spirochætes tends to congestive stasis of the vessels of the brain, especially in those regions, namely, fronto-central, where, owing to the mechanical condition of the arterial supply and the venous return, congestive stasis is favoured in veins and capillaries. Hence these are the regions where spirochætes are more readily found, and where decay and degeneration of the neurones earliest occur. But the inflammation of the vessels causes, together with the toxins produced by growth of the spirochætes, first irritative and then destructive effects upon the neurones.

The congestive seizures, according to my experience, are especially associated with microscopic appearances of acute congestive stasis of the vessels, which may in early cases be more or less localised. It is probable that the multiplication of the spirochætes is associated with the escape into the cerebro-spinal fluid of lipolytic and proteolytic toxins, and, therefore, they can act at a distance from their seat of production, and so cause, independently of serious active congestive stasis, a progressive widespread decay and destruction of the cortical neurones, such as occurs in the slow dementing forms. The signs of cortical irritation manifested by convulsive seizures, and mental excitement manifested by expansive delirium, are probably indicative of active spirochætal development, causing a congestive stasis and liberation of toxins. The spirochætes may undergo an active development in one hemisphere, and cause unilateral convulsions. The irritative process is followed by decay and destruction of the cortical neurones of one or both hemispheres, according to the colonisation of the spirochætes in one or both hemispheres. This accounts for the fact that usually one hemisphere is more wasted than the other when examined *post mortem*. Especially is this the case when there have been constant unilateral convulsions; and I have known instances where there has been a difference of 60 grm. in weight between the two hemispheres. And in a few cases of tabo-paralysis, where the knee-jerks have been absent on

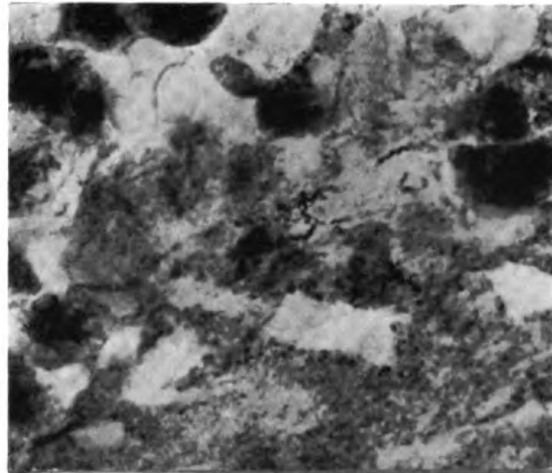


FIG. 3.—Section of one of these nodules, showing cells filled with the black granular products of spirochætal plasmolysis. Some spirochætes are seen in the middle in process of degeneration. In one part of the section are several unstained outlines of red blood corpuscles; this shows that the spirochætes seen are amidst the perivascular sheath cells. $\times 1550$.

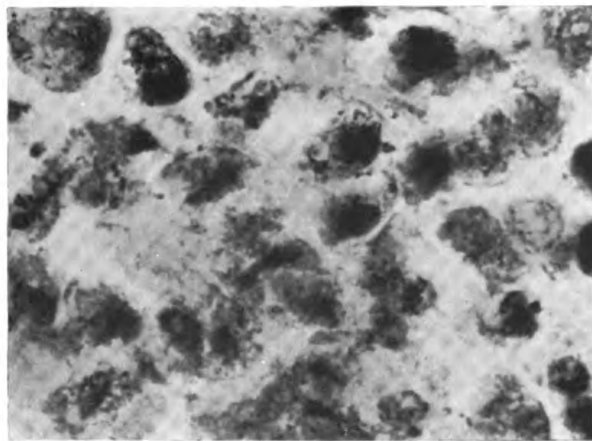


FIG. 4.—Section of a nodule in which the spirochætal destruction is more complete, and within and amidst the cells are the granules of the degenerated spirochætes. $\times 1450$.

To illustrate paper by Dr. MOTT.

Adlard & Son, Impr.

both sides, I have seen the jerk return on the side of the motor convulsions. Such cases have shown a great difference in weight, the hemisphere corresponding to the return of the knee-jerk being much more wasted. Moreover, I have observed that, as a rule, when there has been a marked speech affection the left hemisphere has been the seat of the greater amount of congestive stasis and destructive decay. These facts tend to show that it is the colonisation of the spirochætes, with the inflammatory reaction produced, which is responsible for the morbid changes observed *post mortem*, and that with these morbid cortical changes may be correlated the signs and symptoms observed during life. The constant existence of the Wassermann reaction in the cerebro-spinal fluid may be regarded as evidence of the presence of spirochætal toxins; and it may be assumed that the granular appearance of the ependyma of the fourth ventricle, the most characteristic naked eye appearance met with in this disease, is probably in some way connected with a prolonged chronic irritation and proliferation of the ependyma cells, due to the action of the toxin contained in the fluid of this region.

The Spirochætes in Relation to the Cerebro-spinal Irrigation System of the Brain.

While it is established beyond doubt that tabes and general paralysis are caused by the spirochæte of syphilis, it is still an unsettled question why a relatively small proportion of persons who have been infected suffer with these late manifestations. I have seen cases of undoubted cerebro-spinal syphilis terminate in general paralysis and tabes. Straussler has also recorded cases, but these are rare. It is an undoubted fact that examination of the cerebro-spinal fluid in the secondary stage shows that in a considerably greater number of cases a lymphocytosis exists than clinical symptoms would indicate. This lymphocytosis points to spirochætal infection of the membranes, although the infection may not cause clinically *perceptible* neural irritation or destruction. Ravaut and later Sézary, Gennerich, Dreyfus, Werther, and other authorities have emphasised the importance of examination of the cerebro-spinal fluid both for cells and by the Wassermann and globulin reactions. The Wassermann reaction may, under treatment,

disappear from the blood and be present in the fluid. It is quite possible, therefore, that while treatment may rid the body of spirochætes when there has been no infection of the central nervous system, it is another matter when the organisms have established colonies in the central nervous system.

In my Oliver-Sharpey lectures I pointed out the fact that the cerebro-spinal fluid contained no protein nor leucocytes, and, therefore, invading protozoa, for example trypanosomes or microbes, owing to the absence of the natural defences of the blood, found there a safe retreat, and were with great difficulty eliminated by treatment, because mercury, arsenic, and antimony, as well as other germicides, do not pass through the choroid plexus into the cerebro-spinal fluid. There is reason to believe that the cerebro-spinal fluid functions as the lymph of the brain. I have shown the existence of a canalicular irrigation system (*vide* Figs. 5 and 6). The very instructive and valuable researches of the late Professor Goldman have supported this view. He showed that you could inject 100 c.cm. of a 1 *per cent.* solution of trypan blue into a vein of an animal without injuring it, and without staining its central nervous system. The cells of the choroid plexus alone are stained. If, however, 2 c.cm. of a 0.5 *per cent.* solution be injected by lumbar puncture into the subarachnoid space the animal often died of convulsions (neuronic irritation). Examination of the central nervous system showed the whole spinal axis and the base of the brain (but not the convexity) stained blue; moreover, microscopic investigation showed the spinal neurones themselves were stained. We shall see that these facts have a very important bearing upon the treatment of syphilis of the central nervous system, and the many new methods which have been introduced to rid the central nervous system of the syphilitic organisms by direct destruction or by aiding Nature in doing it. Before, however, passing to a consideration of recent developments in treatment, it is necessary to make a few observations upon the methods adopted by Nature.

The Production of Specific Antibodies in Relation to Remissions.

A large experience in the examination of brains of general

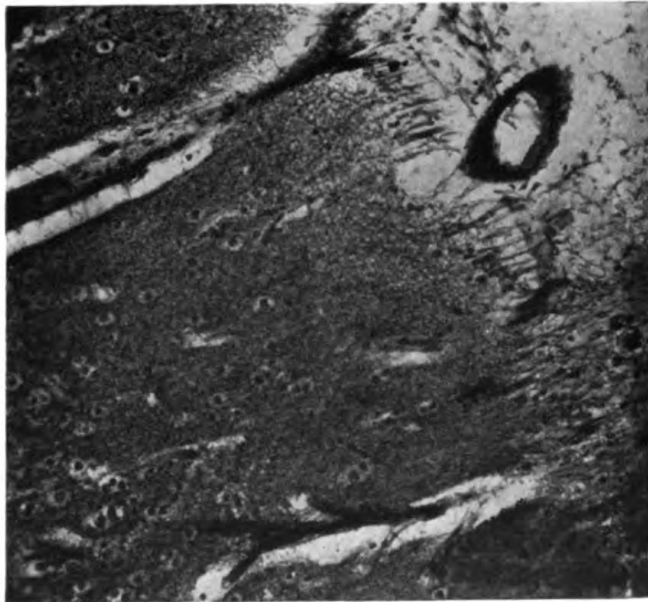


FIG. 5.—Photo-micrograph of the brain of a monkey—experimental anæmia produced by ligation of two carotid and one vertebral arteries—showing two vessels with the dilated perivascular sheaths continuous with the subarachnoid space. Both are distended with a clear fluid; fine trabeculæ (lined by endothelial cells) can be seen stretching across from the wall of the vessel to the nervous substance, therefore the dilatation is not due to an artefact. $\times 200$.

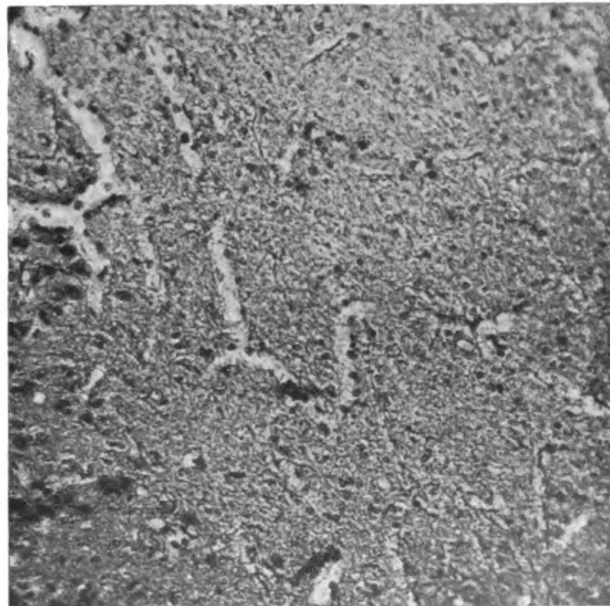


FIG. 6.—Photo-micrograph of the subcortical white matter of the same specimen as Fig. 5, showing the dilated perivascular spaces distended with a clear fluid. The contained blood vessels and capillaries are collapsed and empty. In the grey matter these pericapillary spaces can be seen connected with the perineuronal spaces, but these are not shown in this illustration. $\times 200$.

To illustrate paper by Dr. Mott.

paralytics for spirochætes has led me to think that the inflammatory reaction which is so marked in early cases is the result of toxins produced by the pullulation of the spirochætes. The toxins themselves, and the inflammatory reaction caused by them, may be a cause of the irritative phenomena, which take the form of convulsive seizures and psychic irritation, accompanied by mental disorder and delusions. But the inflammatory reaction leads to the production and release of antibodies which cause destruction of the spirochætes (Figs. 2 and 3). The symptoms are in all probability, therefore, due partly to intense local effects, but also to general intoxication, and reaction of the whole cortex to the poison. As the natural defences overcome the specific organism (provided the patient does not die from some intercurrent complication), the active irritative phenomena tend to subside, and the mind to recover more or less of its normal functions. But there is, in almost every case, some degree of neuronc destruction and dementia following an attack. Even those cases which are occasionally discharged as cured are, however, only apparently cured, for sooner or later a relapse occurs, due to the fact that some of the spirochætes have resisted the antibodies produced, and, being immune to them, commence to multiply, producing toxins which cause a fresh outburst of irritative phenomena, which upon subsidence leaves the patient the more demented in proportion to the fresh neural destruction.

This view, based upon facts that I have mentioned, agrees with the opinion of Ehrlich that each relapse may correspond with the multiplication of spirochætes which are resistive to the antibodies formed, and therefore continue to multiply and produce toxins until the tissues have elaborated a new and efficient spirilloccide antibody. Such an hypothesis opens up the question how specific agents such as arseno-benzol compounds and mercury act as therapeutic agents; and a number of experiments have been performed relating to this question, an admirable summary of which is contained in a recent paper by Shreiber.

Experiments on Animals in Relation to the Therapeutic Action of Mercury and Arsenic Compounds.

Ehrlich and Hata believed that salvarsan had a direct

spirillocide action ; the typical fever following an intravenous injection is said to be due to destruction of spirochætes. In support of this statement may be mentioned the fact that salvarsan exercises a curative influence only on skin lesions which are specific, presumably by destroying the spirochætes. Ullmann has found more arsenic in diseased than in healthy tissue after injection of salvarsan. Loeb and others found more iodide in syphilitic than in healthy tissues. Doubts have been expressed whether salvarsan owes its therapeutic properties to a direct action on the spirochætes. There is no doubt that it may excite a strong leucocytosis, and so favour phagocytic action, and it is certain that an increase of antibodies and of immunity processes cannot be denied as effects of salvarsan. Gonders and also Castelli have shown that salvarsan *in vitro* does not kill spirilla, but destroys their capability of developing in the animal body. The experiments of Ehrlich and Bechold showed that therapeutic agents which are not active *in vitro* become active in the body. Ullmann introduced into the peritoneal cavity of mice nagana trypanosomes with 1·5 *per cent.* solution of neo-salvarsan, and found that this sufficed to kill the trypanosomes in forty minutes at the most, a time too short for the production of immune bodies, etc.

Other experiments seem to show that these benzol compounds of arsenic have a spirillocidal action ; and this is not due to the benzol independently of the arsenic, but to a chemiotropic action by which the arsenic fixes on the parasite. The fact that (as Gonders showed) trypanosomes may become "arsenic-fast" supports this conclusion. Such trypanosomes probably do not possess a periplasium which is positively chemiotropic to this particular arseno-benzol compound, therefore they can multiply in its presence.

All known mercury preparations can cause a cure of fowl spirillosis. Experiments of Hahn and Kostenbader showed that if too large doses of mercury are given a curative effect is not obtained, whereas smaller doses do effect a cure. Mercury is not a spirochæte poison in the strict sense of the word ; in moderate doses it stimulates the production of antibodies ; in too large doses, by its devitalising effects on the tissues, it inhibits the production of antibodies. Salvarsan, on the contrary, is more effective in large doses when injected intra-

venously. Intramuscular injections of salvarsan are not so effective as intravenous injections, which, according to the work of Meyer, is not the case with mercury.

It is said that the introduction of hydroxyl and amido groups completely changes the mode of action of these groups of aromatic compounds of the metals, arsenic, and mercury. The evidence so far seems to show that we obtain by salvarsan the death of the spirochætes if the drug has the opportunity of coming into contact with them, and when followed by the stimulating effect of mercury, introduced either by inunction or intramuscular injection, the immunity reactions of the body are increased, and the cure maintained. These are the two therapeutic principles underlying the modern treatment of syphilis, and in the intensive treatment these conditions are fulfilled. The above account is a summary of a valuable article by Schreiber.

THE DIAGNOSIS.

I will now refer to my experience as regards the Wassermann reactions of the blood and cerebro-spinal fluid in diagnosis.

The value of the Wassermann reaction in the diagnosis of general paralysis is shown by the control by *post-mortem* examination of a very large number of cases of admissions to the asylums which have had the blood and fluid examined by the Wassermann test. A positive reaction of the blood may occur, and even a marked reaction, in a large number of people who are not suffering, so far as clinical signs and symptoms show, with disease resulting from the action of the virus. It is another matter when the cerebro-spinal fluid gives a positive reaction, for this is an indication of invasion of the central nervous system by the spirochæte or its toxin. Whereas *post-mortem* records show before the introduction of the Wassermann reaction correct diagnosis of general paralysis in only 75 *per cent.* of the cases, by the aid of the Wassermann reaction it is rare to find an error of diagnosis in respect to this disease when, in combination with the history and the clinical signs and symptoms, the fluid has been examined.

The test employed by my assistants, Dr. Candler and Mr. Mann, has been conducted on the original Wassermann

technique—that is, using specially prepared alcoholic extracts of syphilitic foetal livers, and alcoholic extracts of human heart with an addition of cholesterol, according to the method of Sachs. The serum is inactivated by heating to 56° C.

A positive Wassermann reaction in the cerebro-spinal fluid was only found in cases of general paralysis, tabes, and syphilitic disease of the central nervous system. The subjoined table shows the results obtained at the laboratory.

Increase of globulin and pleocytosis do not of themselves prove the syphilitic character of a disease of the central nervous system. The strength of the reaction is an important means of determining whether there is an active spirochætosis. Thus, in nearly all cases of general paralysis the reaction is obtainable in all dilutions.

*Results obtained by my Assistants, Dr. Candler and
Mr. Mann.*

Positive reactions on cases confirmed as general paralysis at autopsy	=	270
Negative reactions on cases shown not to be general paralysis at autopsy	=	52
Negative reactions on cases found to be general paralysis at autopsy	=	5
		<hr/>
Total	=	327
		<i>per cent.</i>
Total percentage of accurate results on all cases =		98·4
Total percentage of positive reactions in cases of general paralysis	=	98·1

Asylum Cases: Serum Reaction in General Paralysis.

The Wassermann test on the serum of 300 cases of general paralysis showed incidence of positive reactions of 98 to 99 *per cent.* The reaction is generally marked positive, but a number of cases give slight or moderate reactions. (*Archives of Neurology*, vi, 1914, p. 64. Candler and Mann.)

We may conclude that a positive Wassermann reaction with the serum is almost a constant feature in general paralysis, provided that the Wassermann technique is reliable, and adequate maximum amounts of serum (0·2–0·5) are used.

TREATMENT.

My experience as regards treatment by modern developments has not been sufficient to speak at any length, but from the literature I have read, and from the evidence I have heard at the Royal Commission, together with my laboratory experience, I have come to the conclusion that these late degenerative forms of syphilis of the nervous system (and I refer especially to general paralysis) have not been cured, nor even greatly benefited, by any treatment with salvarsan or neo-salvarsan, whether administered intravenously or intrathecally. Certainly in tabes the pains have disappeared, and the patient has improved, but the same was the case with mercurial inunction. Some of these cases of general paralysis which have died, and in which I have examined the brain for spirochætes, had been treated by salvarsan prior to admission to the asylum, and in one case very large doses were employed, and yet I found more spirochætes in that case than any other. I have seen cases during life not only not benefit, but become decidedly worse after intravenous injection of salvarsan. In a study of the literature I have failed to find any clear proof of cure or arrest of general paralysis by any of the methods employed. Those cases in which a remission of symptoms occurred after treatment may, as Oppenheim says, be explained by coincidence, for we know very well cases have remissions without any treatment. Those in which *cure* is claimed by enthusiasts may be due to error in diagnosis. If the salvarsan be introduced into the blood, and continuously, in the hope that eventually traces may pass into the cerebro-spinal fluid through the choroid plexus, and thus the drug be enabled to attack the spirochætes, or if it be introduced intrathecally in small doses, as Ravaut recommends in hypertonic solution, or as others—for example, Marinesco, Robertson, Swift and Ellis, Purves Stewart—have done in the form of salvarsanised serum, the question always arises whether it is able to get at the spirochætes, and if it does, whether it is in sufficient amount to kill or harm the organism without killing or harming the neurone. The similarity in staining reactions of the neuro-fibrils and the spirochætes may be indicative of a similar chemiotropic action.

Candidly, I do not think any measure of success has attended any of the methods of treatment so far employed for general

paralysis. In respect to cerebro-spinal syphilis the value of salvarsan is unquestionable, if it is carefully administered, and a Herxheimer reaction avoided. Fatal cases have occurred owing to neglect of this precaution. Salvarsan or neo-salvarsan should be given in small doses, gradually increasing the amount, and if there is no urgency it is better even to give a fortnight's treatment with mercury before commencing the salvarsan. By treatment the lymphocytosis will rapidly diminish and disappear even in parenchymatous syphilitic affections. The Wassermann reaction and the globulin reaction, however, are extremely obstinate, and certainly they do not disappear, so far as my experience goes, after intravenous or spinal intrathecal injections. We must rather look to the prevention of the spread of syphilis, and its early diagnosis and treatment by modern methods, as the most hopeful way of combating this terrible malady. Of the total admissions to the asylums of the County of London every year about 10 *per cent.* are general paralytics; more than 15 *per cent.* of the male admissions are general paralytics, and these are recruited from men of all social grades, who, prior to the onset of the disease, for the most part were efficient and productive social units of civic worth and capacity. True, the females are largely recruited from the unfortunate class of women, many of whom are mental defectives, but many have been driven to prostitution by seduction, desertion, and destitution, yet a good number are the innocent wives of men by whom they have been infected, and who are unaware of the real cause of the disease. Moreover, the histories of the families of paralytics show that not infrequently they have transmitted syphilis to their offspring. Incidentally I may remark of the sixty juvenile paralytics I have collected, in 20 *per cent.* one of the parents—usually the father—was a paralytic. The inquiry I have made regarding the incidence of general paralysis in the two sexes in the London parishes shows that the females are relatively more numerous in the poorer East End parishes, and there is a correlation between female paralysis and degraded poverty. Now, it is interesting to note that the higher you rise in the social scale the less often do you meet with general paralysis in the female sex. This is not the case with the male sex, for it is pretty equally distributed in all grades of society. In the juvenile form, where the chances of syphilitic infection are equal, the sexes are equally affected. The

incidence of general paralysis, therefore, in a population may be looked upon as a measure of the incidence of syphilis.

(¹) An address delivered at the opening of the Section of Neurology and Psychological Medicine, British Medical Association Annual Meeting, Aberdeen, 1914.

DISCUSSION.

Dr. PLAUT (Munich) thought that inquiry should be directed to ascertain whether in general paralysis the spirochæte was present in the parenchyma of other organs as well as the brain. He believed, however, that the most important results likely to be obtained at the present stage would be by experiments on animals. He thought that treatment by the injection of salvarsan intraspinally and into the ventricles should be continued. He considered that the only effective treatment would be by the use of salvarsan in the early stages of syphilis.

Dr. J. MCINTOSH said that some time ago Dr. Fildes and he had advanced the theory that parasyphilis of the central nervous system was an active syphilitic process. The failure to find spirochætes in the lesions was ascribed to their scarcity and to faulty technique—a difficulty which Noguchi had since overcome. Further researches had convinced them that late syphilis of the central nervous system was a tertiary syphilitic process, and was of two types—namely, parenchymatous encephalitis and interstitial encephalitis. The essential difference between these lay in the tissues affected; in the parenchymatous form the nerve tissue proper was attacked, while in the interstitial it was the connective tissue and lympho-vascular structures. An early form of parenchymatous encephalitis occurred in the secondary period of this disease. The conception was that the structures affected in the central nervous system were under the influence of allergy—were hypersensitive to the syphilis toxin. In the encephalitis of the secondary period the amount of tissue reaction was slight, and yet there was reason to suppose that the spirochætes were as numerous as in other secondary conditions. Again, in the chronic parenchymatous lesions, dementia paralytica and tabes dorsalis, though the extent of the lesion was great the number of spirochætes was usually extremely small. There was thus the same lack of relation between the extent of the lesion and the amount of the virus as was observed in early and late syphilitic lesions elsewhere. This was to be attributed to a change in the susceptibility of the tissues. This hypersusceptibility of the tissues was developed in the later stages of syphilis as an immunity response to the general invasion of the body during the acute stage. Recent researches had shown that the central nervous system was affected very frequently during the acute stage of the disease. In most cases the meninges were alone involved (though it was not improbable that a few spirochætes might wander into the brain substance proper and there lie dormant). The onset of the symptoms of parenchymatous syphilis at a later period was the result of an increased activity of the spirochætes which had remained dormant. The spirochætes, it was believed, entered the lymphatic system of the brain from the blood, and passed up the afferent nerves during the secondary period. The researches of Orr and Rows and others had distinctly shown that the way of the lymphatics was the way of the nerves. Thus the system lesions of parenchymatous syphilis could be explained (tabes optica, etc.). The differential diagnosis of many of these cases was extremely difficult, and any marked and continued improvement, either clinical or serological, in a supposed case of parasyphilis should at once call for a fuller investigation of the symptoms on which the diagnosis was based. A quantitative estimation of the Wassermann reacting power of the serum and cerebro-spinal fluid in all such cases was of the greatest importance in keeping a record of the case, and in detecting an early improvement. Treatment was ineffective in parenchymatous syphilis because antisyphilitic drugs in the blood were unable to pass from the capillaries into the nerve substances in order to destroy the spirochætes. Their failure to reach the brain was not, as some authorities held, due to the drugs not being excreted into the cerebro-spinal fluid by the choroid plexus; the cerebro-spinal fluid was not the lymph of the brain. Recent experiments, as yet unpublished, showed that many chemical substances could pass directly from the blood to the brain substance

without the intermediary of the cerebro-spinal fluid. It was, however, true that substances injected directly into the lumbar sac reach the brain quite readily, since they had practically only an endothelial membrane to pass through. Recently this method had been adopted in administering salvarsan and salvarsanised serum in parenchymatous syphilis. In the cases thus treated and observed with Drs. Head and Fearnside at the London Hospital no improvement apart from that due to the intravenous injection of the drug was noted. The explanation was that, owing to the great toxicity of the drug on the parenchyma of the brain, a therapeutic dose could not be administered in this way. Dr. McIntosh said that Dr. Fildes and he were therefore of opinion that intrathecal injections of salvarsanised serum or of neo-salvarsan in its present form would be disappointing. A drug capable of curing parenchymatous syphilis of the brain had yet to be discovered.

Dr. J. E. R. McDONAGH thought there could be no doubt that the organisms of syphilis reached the central nervous system very early in the so-called secondary stage, and that they invaded the central nervous system in the majority of cases of syphilis. Since the work of Orr and Rows the opinion had gained ground in this country that invasion occurred along the lymph channels and spaces of nerves, but he himself believed that the spore of the *Leucocytozoon syphilidis*, which was, in his opinion, the real cause of syphilis, reached the central nervous system either directly by means of the blood stream, or indirectly by spreading from the meninges—the meninges having been primarily infected through the blood stream. He had found the phases of the *Leucocytozoon syphilidis* in both the pia mater and the brain substance in nine of the ten cases of general paralysis so far examined, and the examination of the cerebro-spinal fluid showed that the neuro-recurrences are primarily meningeal lesions. Pure arterial lesions were not infrequently seen early in the disease, giving rise to myelitis if the endarteritis occurred in the cord, and hemiplegia if it occurred in the brain. The lesion need not necessarily be localised as in the above, but generalised, and, if occurring in the brain, gave rise to acute hæmorrhagic encephalitis, which was a true syphilitic condition. He had seen a case in which death occurred before any treatment had been prescribed, but its more frequent occurrence after salvarsan threw light upon the nature of syphilis of the central nervous system. The organisms traversed the whole brain substance, but gave rise to no symptoms until the cortex was reached (encephalitis). Later lesions might appear in any position, and in more than one position, along the whole course of the vessel from the basilar artery to its finest branch. This explained how gummata might occur in any part of the brain. Spores could invade the tissue around the vessels, and give rise to no symptoms until they completed their life-cycle—months or even years later. Some cases of general paralysis doubtless arose in this way. Other cases of general paralysis, and probably most cases of tabes, arose from a direct spread of the organisms from the meninges into nerve substance. In syphilis of the central nervous system the pressure of the cerebro-spinal fluid might be raised, there might be a lymphocytosis, either pure or containing several polymorphonuclear leucocytes and endothelial cells; there might be an excess of albumen and globulin, a positive Wassermann reaction might occur, and oxidase ferments could sometimes be found. Homer, Swift, and Ellis had obtained good results by injecting intraspinally serum rich in antibody, but it was feared the treatment was only palliative, and several injections were necessary to obtain a satisfactory result. The patient was first given an intravenous injection of salvarsan or neo-salvarsan, and an hour later blood was withdrawn. The following day the serum was collected, mixed with an equal quantity of distilled water or saline (about 25 c.cm. of each), and after a corresponding amount of cerebro-spinal fluid had been withdrawn, the diluted serum was injected into the spinal canal and the patient placed with his head low down, and the bottom of the bed raised, so as to allow the fluid to gravitate towards the brain. His best results had been in cases of cerebro-spinal syphilis, in which the improvement had been remarkable; but, as a rule, about eight injections, given at weekly intervals, were necessary before the cerebro-spinal fluid approached the normal. In many cases of cerebro-spinal syphilis as good results might be obtained by intravenous injections of salvarsan and mercurial inunctions. Some cases of tabes had markedly improved, the pupil reflexes had returned, the crises had disappeared, and the gait had become steadier; but much depended upon the stage the patient was in when treated. Some cases had remained unaltered and a few had been made worse. He

knew of five cases in which death resulted, but which would not be published, and he heard on good authority that many of the cases first treated at the Rockefeller Institute had recurred, and that the treatment had not proved as satisfactory as was anticipated. Two cases of general paralysis of the insane which he had injected were undoubtedly made worse; three other cases improved, but only to a slight extent. Cerebro-spinal syphilis, tabes, and general paralysis of the insane were not only extremely closely related, but might merge into one another. If during the stage of the generalisation of the virus sufficient salvarsan to cure the symptoms were given, but not to sterilise the system, should a recurrence appear, the chances were that it would be generalised and indistinguishable from the original trouble. During the stage of general infection that part of the nervous system which was fed by blood—namely, the meninges and blood vessels—became infested with organisms. Sterilisation of the systemic part did not sterilise the meninges. There were no antibodies except in the cerebro-spinal fluid, with the result that a generalised meningitis ensued. Should the organisms spread in the nervous part, but be crippled in the systemic part, as occurred under treatment by mercury, localised symptoms prevailed, with the appearance of two separate types—the pure cerebral and the pure spinal. When the extension of the organisms had become greater and the vascular disturbance more marked, tabes and general paralysis of the insane would follow, and appear late in the course of the disease when the production of systemic antibodies was checked. If adequate treatment were begun before the nervous system was attacked, it would presumably always remain free. If treatment was begun after the nervous system had been attacked, and the treatment was sufficiently powerful early in the disease to stop the host producing antibodies, symptoms of the nervous system, should they arise, would be those of cerebro-spinal meningitis. If the production of antibodies were not stopped till late in the disease, tabes and general paralysis of the insane would ensue. Therefore, if treatment were begun in the secondary stage with mercury alone, or with one or two injections of salvarsan, the patient would run greater risks of getting tabes and general paralysis of the insane. If, on the other hand, several injections of salvarsan were given, and supplemented with mercury, cerebro-spinal syphilis was more likely to result. The moral was to diagnose a sore at once, and to put the patient under treatment which might be expected to cure the disease completely.

Dr. ALDREN TURNER, who confined himself to the treatment of parasyphilitic diseases by intrathecal injections of salvarsanised serum, based his remarks upon eight cases: six cases of tabes dorsalis, one of primary (tabetic) optic atrophy, and one of general paralysis. No selection was made. The duration of the symptoms prior to this treatment varied from three months to five years. Some of the patients had been treated previously on old established lines. He considered results of the special treatment from three sides: (1) As to its influence upon the health of the patient, it might be said that in a general way all the cases showed improvement, and some increased in weight. The results did not differ from those obtained by the older methods, or from what might be expected to follow rest in bed, careful diet, massage, and the general hygiene of a hospital course. (2) As to its influence upon the special symptoms and signs of the tabetic disorders, in every case the subjective symptoms were relieved, and in some the pains entirely disappeared. In a case of advanced tabetic optic atrophy it seemed at first as if vision might improve, but this did not occur. Contrary to expectations and to the general experience, the case of early general paralysis showed marked improvement in the mental symptoms even after the first injection, and this was maintained during the patient's stay in hospital. In no one of the cases was there any alteration observed in the physical signs of the disease. The reaction of the pupils, the state of the deep reflexes, the sphincters, the deep muscle pain, analgesia, and the impaired joint sense remained unaltered throughout. The improvement noted in the ataxia was attributed correctly to the use of Fraenkel's exercises. (3) As to its influence upon the condition of the cerebro-spinal fluid, at the first examination all the cases showed a well-marked positive Wassermann reaction. After three injections most of the cases showed a barely appreciable lessening of this reaction; in one case a weak positive reaction was intensified; in no case was a positive reaction rendered negative. The sole change was a definite reduction in the lymphocyte count. This was observed in every case. It was, he considered, too soon to form a clear opinion upon the benefits to be derived from this method of treating parasyphilis.

The impression which the cases had made upon his own mind was that the results had been no better, nor more quickly obtained, nor more permanent than those which might result from a thorough course of mercurial treatment. Until a sure and ready method was available for ascertaining how much arsenic was present in the infected serum, the procedure had about it a flavour of speculation. The introduction of arsenic into the cerebro-spinal lymphatic system rendered possible by this method would be undoubtedly a valuable auxiliary method of combating the disease in conjunction with mercurial treatment; and Ravaut's method of direct injection of neo-salvarsan into the subdural space offered a more ready means of utilising lymphatic routes in conjunction with mercurial inunction, but Dr. Turner's single experience of the method of direct injection was such that he had no desire to repeat it. The only obvious alteration in the state of the cerebro-spinal fluid was a decrease in the lymphocyte count, and it was possible that this might be explained by the dilution of the fluid which a number of injections of 20 c.cm., 30 c.cm. or more of serum would bring about. As the treatment was free from danger, and as complications, such as temporary increase of the lightning pains or the precipitating of a gastric crisis, were of short duration, further observations would no doubt be forthcoming, but he thought it too early to say whether it would replace the old-established methods, or even aid their results.

Dr. GRAINGER STEWART said that at present he considered it impossible for anyone to speak with confidence as to the ultimate effects of the newer forms of treatment in cases of syphilis of the nervous system. It appeared that intraspinal treatment was sometimes dangerous in cases of general paralysis, and did little or no good in cases of tabes. His personal experience of intraspinal treatment had extended over a period of nine to twelve months, during which he had treated over forty cases. He had first of all given intravenous injections of salvarsan or neo-salvarsan, and when the reaction of the blood serum had become negative he had then given from three to six injections of the serum intraspinally. Most of the cases had been under observation for six months, and it was yet too early to report on the results of treatment; but in cases of meningeal syphilis or vascular syphilis the results had been good, and the recovery noted had exceeded in extent and rapidity that obtained by mercury and iodide. At the same time he would always advise the combination of the old and the new methods. He had treated four cases of general paralysis all in the early stages, but had not noted any marked change in the direction of improvement, but, on the other hand, he had not met with any bad results. This was, perhaps, due to the fact that he had given very small doses. He had treated about twenty cases of tabes, and had noted that some improved and that others remained unchanged, but in no case had he seen a greater degree of recovery than had been noted in cases treated with mercury and iodide and Fraenkel's exercises. He had not noted any change in physical signs in tabetic cases, although this had been more or less common in cases of meningeal syphilis. The practical point was the distinction between parenchymatous and interstitial syphilis; in the latter intraspinal treatment undoubtedly did good, while in the former its value was not yet known, and, despite some of the bad results reported, he would favour its use provided small repeated doses were given.

Dr. W. FORD ROBERTSON said a remarkable feature of the discussion had been the unanimity with which the speakers had accepted the view that infection of the brain by the *Spirochæta pallida* was a complete explanation of the causation of general paralysis. He held that in many respects the evidence was defective. The disease had never been produced experimentally by infection of lower animals with the *Spirochæta pallida*. The failure of antisiphilitic treatment suggested that factors additional to the action of this protozoon were in operation. There was no proof that all of the spirochætes described as occurring in the brain were of the kind alleged; many of them might be saprophytic forms that had invaded shortly before death, as bacteria very commonly did. It was strange that it had not been thought necessary to study control brains in the same way. He believed that the frequency of the occurrence of the *Spirochæta pallida* in the brain of the general paralytic had been exaggerated, although there remained a large number of positive observations that were perfectly satisfactory. He had always held that syphilis was an important factor in the pathogenesis of general paralysis, but he also maintained that there was a bacterial factor of equal importance. There was a form of chronic infection, located chiefly in the mucosa of the alimentary tract, by

bacilli of the diphtheroid group, which was extremely common. It occurred without complication in a certain type of neurasthenia. It had been demonstrated that these patients were absorbing diphtheroid bacilli from an infective focus, and that these organisms, though for the most part destroyed in the blood, were excreted in large numbers by the kidneys, and could be found, in a disintegrating or living state, in the centrifuge deposit from the urine. The pathogenic action of these bacilli was chiefly a neurotoxic one. A similar diphtheroid infection, with excretion of the organisms in the urine, occurred in cases of dementia præcox, and there was already weighty evidence that it was an important element in the causation of this form of insanity; an hereditary predisposition to the fixation of the toxins by the cortical nerve cells was apparently another element. A similar form of chronic infection had been found in several cases of exophthalmic goitre, and in acute and subacute forms of toxic insanity. In cases of the kind named, autogenous diphtheroid vaccines had been found to be curative. In general paralysis a similar chronic infection by diphtheroid bacilli occurred with constancy; the living or disintegrating bacilli could be demonstrated in the urine. But the general paralytic was also excreting these bacilli from the blood stream into his cerebral lymphatic spaces. This was no hypothesis, but a fact that had frequently been demonstrated in various ways. It was probable that the cerebral vessels, in consequence of a syphilitic inflammatory process that had affected them, had been rendered permeable by bacteria circulating in the blood. When other bacteria—such as coliform bacillus or pneumococci—reached the blood stream, as they were apt to do from infective foci in the alimentary and respiratory tracts in these cases, they also tended to pass through the walls of these damaged cerebral vessels. Congestive seizures were commonly caused in this way. He maintained that the diphtheroid intoxication of the brain was an essential part of the pathogenesis of general paralysis. In tabes dorsalis there was always a severe diphtheroid infection of the urethra, until secondary infections displace it, and consequent intoxication and infection of the posterior root ganglia and spinal cord by way of the lymphatic channels in the pelvic nerves, which, in conjunction with a spinal syphilitic lesion, were, he maintained, a sufficient explanation of the degeneration of the posterior columns in this malady. He thought it strange that Dr. Mott, while treating this view as unworthy of notice, should accept the absorption of syphilitic toxins by the same channels, from a hypothetical syphilitic area somewhere in the neighbourhood, as a satisfactory explanation of tabes dorsalis. In concluding, Dr. Robertson maintained that hope of reaching successful methods of treatment of general paralysis and tabes lay in the recognition of the fact that there was not only a syphilitic element to combat, but also a bacterial one, and in adopting suitable measures against both.

Dr. A. W. FALCONER said that for the last few weeks he had been giving direct intrathecal injections by means of the technique described by Schubert of Altona. This method had the merit of extreme simplicity, the only apparatus required being an ordinary lumbar puncture needle with a rubber tube and funnel, and a 3 c.cm. glass capsule. So far he had not used a dose larger than 0.0015 grm. neo-salvarsan. He had carried out repeated intrathecal neo-salvarsan injections in twelve of Professor Mackintosh's cases, but as the results had not differed from those described by Dr. Turner, it was unnecessary to describe them in detail.

Drs. CAMPBELL THOMSON and JOHN THOMSON also spoke.

William Blake. By HUBERT J. NORMAN, M.B., Ch.B.,
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S.E.

I.

THE association between the artistic temperament and eccentricity has frequently been noted, and in the lives of Turner, Vandyck, Michael Angelo, Benvenuto Cellini, Morland, Romney, Maclise, Landseer, Haydon, Cosway, and many others there is much to support Nisbet's contention that "nerve-disorder is a fundamental element of genius in relation to colour and form." To the list already given, the name of William Blake may fittingly be added, for, just as some of those named at times passed the boundary which separates sanity from insanity, so most certainly did Blake also cross the borderland.

It does not, of course, follow that because those attributes which are usually associated with the term genius are so frequently found in conjunction with unsound mental action that they, therefore, arise from the nerve-disorder; rather is it that they both proceed from a nervous system in a condition of unstable equilibrium, which may either exhibit complex reactions in the production of some work of high intellectual grade, or tend at other times to display those irregular functionings which are termed eccentric or insane.

That conduct of an eccentric or even of an insane nature has been observed in many artists is undoubted; indeed, so frequently has such conduct been noted that some writers have inferred that eccentricity is an invariable concomitant of the artistic temperament. The tendency to caricature is, however, very widespread; that which is a prominent trait in such writers as Dickens, Swift, Cervantes, or Heine, or of such artists as Hogarth, Jan Steen, Cruickshank, or Teniers, is no less noticeable a feature of all but a few—a very few—people. The usual conception of a madman as one who rages furiously about, seeking, like the Devil, those whom he may assault or destroy; or as, alternatively, one who sits gloomily apart, morose, sullen, misanthropic, and, like Job, curses the day of his birth; or the popular notion of asylums based upon the reading of the modern homologues of *Hard Cash* and *Valentine Vox* as places where sane people are incarcerated by designing relatives, and



WILLIAM BLAKE.

FROM A PAINTING (1807) by THOMAS PHILLIPS, R.A.

Original in the National Portrait Gallery.

To illustrate Dr. HUBERT J. NORMAN's paper.

where they and the actually insane inmates are almost systematically maltreated and misused—such examples as these will suffice to show how easily misconceptions may arise. That being so, it becomes the more necessary when dogmatic statements are made to trace them back to their origin, and to see whether they are based upon facts. Only too often has a vast superstructure of assertion been built upon an inadequate basis of reality. Therefore, when we come to the discussion of the *pros* and *cons* regarding the much-vexed question of the mental stability or instability of William Blake, poet, painter, and engraver, it is necessary to denude ourselves, as far as is humanly possible, of any preconception such as that because he was an artist, and still more because he was also a poet, he must consequently have been insane. In fact, we must not be led blindly into the Shakespearean collocation wherein the lover, the poet—perhaps, had the metre permitted, the artist might have found himself included also—are ranged cheek by jowl with the lunatic. On the other hand, it is important not to be influenced unduly by the dogmatic opinions even of those who, however distinguished they may be in other branches of literature and of learning, are not adequately trained to give a satisfactory judgment in regard to soundness or unsoundness of mind. We may accept their statements of fact without agreeing with their conclusions.

Apart, too, from the question as to whether the term insane may or may not be fittingly applied to Blake, there is an even more important issue to be decided. It is the reliability of his testimony in regard to the veridical nature of his visions and voices. If his evidence is worthy of credence in this respect, then it must be allowed that the hallucinations of every insane person are voices, visions, or messages to other senses, from some supra-mundane or extra-mundane sphere, unless, of course, the system of water-tight compartments is to be made use of in dealing with these matters, as it is in so many other regions of thought. If, on the other hand, these hallucinations of Blake's were really due to some nerve-commotion, and were purely subjective in their nature, and he yet deemed them to be messages from without, and his conduct and beliefs were influenced by them, then—if words are to have any meaning, and are not to be used as symbols, nor merely for their picturesque effect, nor simply for the sake of euphony—William Blake was insane

Those who choose to play the game, so beloved of certain metaphysicians, of "emptying" the term insane of its "contents" may do so, and solace themselves thereafter with a euphemism to fill its place. There is little pleasure or credit in logomachy. Lest, however, any injustice should be done to those whose views are quoted, their actual words will be given. This method, while extending perhaps unduly the length of the following essay, gives to those who read it an opportunity of judging for themselves whether any unfair inferences have been drawn by the writer.

The literature in connection with such a subject is, of course, immense, and the number of commentators, we may almost say, is legion. An attempt has, however, been made to embody herein the observations of the more prominent of those who have discussed the question of Blake's sanity. A more ambitious scheme would have necessitated a volume rather than an essay. It is hoped, however, that sufficient evidence has been incorporated to elucidate the question at issue; further citation and comment, whilst adding to a bulk which is already rather prodigious, would not increase—except from a bibliographical point of view—whatever value may pertain to this study of Blake.

II.

William Blake was born in London in the month of November, 1757. His father was a hosier by trade; regarding him there is, however, little information that is accurate. By some writers he is said to have been of Irish descent, but the evidence in regard to this appears to be unsatisfactory (1). Nor does there seem to be any reason to believe that he was related to Admiral Robert Blake, although this also is asserted. It is interesting to note that Blake's father is described as being a Swedenborgian, for the influence of Swedenborg's writings upon certain of those of William Blake is obvious. Blake appears to have retained little affection for his father later in life; sundry thrashings which that parent found necessary to administer to his son appear to have rankled in his memory. "He long disliked the very word *father*. It is often a term of reproach in his poems," says one of his biographers (2). It is recorded that some of these

castigations resulted from his giving descriptions of his "visions"; his parents, not recognising at first the child's unusual character, looked upon his statements as the result of waywardness or of untruthfulness. Even at an early age, Blake was subject to the outbursts of furious anger which were noticeable in his later life; in this connection we read "Blake's fit of fury at being struck was so violent and appalling that it resulted in the decision that he was not to go to school" (3). When he was sixteen years old, and whilst he was working on a scaffolding in Westminster Abbey, it is recorded that he threw therefrom a boy who had annoyed him. "Occasional outbursts of fury remained always noticeable in Blake," says Mr. Ellis. Although it is agreed by most of his biographers that he was essentially a peaceable man and of mild disposition, yet they all allow that he was subject at times to excessive irritability. At these times, the blow followed quickly on the word, and, on one occasion at least, Blake was involved in serious trouble as a result. His lack of control was exhibited in other and milder forms than that of assault, as it will be pointed out in dealing with his later life.

Of Blake's mother as little is known as of his father. In view of Blake's curious mental history, it is regrettable that so few details have come to light regarding his heredity, for there must almost of a certainty have been some morbid strain. Yet that so little is known is not surprising, for the Blakes were quite an obscure family, and even at the time of his death William Blake's writings and his artistic works were known to comparatively few people. Consequently, little trouble was taken by anyone to put on record facts concerning his family history. As there were disagreements with his father, so also Blake appears to have become estranged from his mother; and, indeed, he appears to have had no great fondness for the other members of the family, except in the case of a brother, Robert, of whom later he spoke and wrote in terms of affection.

Blake's elder brother James is described as "having a saving, somniferous mind," by one biographer; and from another writer we gather that although he was "for the most part an humble, matter-of-fact man," yet that he "had his spiritual and visionary side too, would at times talk Swedenborg, talk of seeing Abraham and Moses, and to outsiders seem like his gifted brother 'a bit mad'—a mild madman instead of a wild and

stormy" (4). James Blake carried on his father's business, and died about three years before his brother William. With him lived the only sister, of whom little is known; she is said to have outlived the rest of the family, and to have died in extreme penury.

Another brother, John, is stated to have been "a dissolute, disreputable youth. . . . He lived a few reckless days, enlisted as a soldier, and died" (5). Blake described him as "My brother John, the evil one." The exact age at which this brother died is not known, but it is agreed that it was whilst he was quite a young man.

The youngest brother, Robert, the favourite of William, died at the age of twenty-four "of consumption." Again, there is little to be recorded concerning this member of the Blake family. He, too, had artistic tendencies, but his early death did not allow of anything more than a slight development of these. Robert Blake died in 1787, and his brother William, with whom he was then residing, "watched continuously day and night for a fortnight by his bedside," or, at least, so says Gilchrist. The same biographer describes the effect of this upon the overwrought watcher: "At the last solemn moment the visionary eyes beheld the released spirit ascend heavenwards through the matter-of-fact ceiling, clapping its hands for joy" (6).

With this generation the family came to an end; Blake left no children of his own, nor had he any nephews or nieces. It may be noted incidentally, and without desiring to lay too much stress upon this aspect of the family history, that a tendency to sterility has been noted in degenerating families—as, for instance, by Morel and Maudsley, and, in regard to those to whom the character of "genius" may be applied, particularly by Lombroso (7).

Nervous instability showed itself even at an early age in Blake and by other signs than that of undue irascibility. We are told that when he was four years old "he saw God in a vision put his forehead to the window" (8); and three or four years later he returned home one day from Peckham Rye asserting that whilst he was there he had seen "a tree filled with angels, bright angelic wings bespangling every bough like stars," while on another occasion he said that he saw "the haymakers at work, and amid them angelic figures walking" (9). In 1772, when he was some fifteen years old, and when he, having

refused to follow his father's trade, was apprenticed to Basire the engraver, he had "a vision of Christ and His apostles" (10).

Whilst he was still in his teens, Blake began the writing of poetry; indeed, according to Gilchrist, "between the ages of eleven and twelve, if not before, Blake had begun to write original irregular verse" (11). These early poems were published in 1783 under the title of *Poetical Sketches*. In 1789 and in 1794 respectively, there appeared his *Songs of Innocence*, and *Songs of Experience*: it is by these earlier poems that Blake's reputation as a poet has been made, and it is by these also that he is likely to be judged. His later efforts in versification—however much they may appeal to those who revel in mystical writings—are too rhapsodical, obscure, and, at times, unintelligible to gain for him many readers. It was, therefore, before he was thirty-seven years old that his chief poetical work was done.

In 1782, Blake married, and went to live in Leicester Fields. The marriage was an important event in his life. His wife, Catherine, was according to all accounts, a most admirable woman; she was patient and long-suffering, and, although her husband's wayward and variable disposition must at times have been a sore trial to her patience, she watched sedulously over him during the remainder of his life. But for such a worthy and attentive helpmate, Blake's career might have ended very differently; just as, for instance, the poet Cowper owed so much to the fostering care of Mrs. Unwin.

Blake continued steadily to work at his engraving and painting during the period immediately subsequent to his marriage; poetry, too, engaged a good deal of his attention. In 1784 he started his partnership with one called Parker, as a print-seller and engraver. There is apparently nothing definitely recorded as to his mental state about this time, but there is little doubt that he experienced the marked fluctuations which were characteristic of the whole of his intellectual life. There has recently been published (12) what Symons describes as "a light-hearted and incoherent satire," entitled *The Island in the Moon*, which is ascribed to this period. It is an amazing production, and it may be safely asserted that such a piece of work is not consistent with sanity on the part of the author. It is for the most part a mixture of coarse buffoonery, of non-

sensical nomenclature, and of scraps of doggerel ; yet here and there are interspersed some of those delightful lyrics which were afterwards printed in *Songs of Innocence*. The association of these charming poems with the fatuous nonsense and the utter vulgarity of the remainder of this fantastic performance is sufficient evidence of the chaotic mental state in which Blake was at this period. There is a marked lack of cohesion, and such an irregular sequence of ideas as are characteristic of pronounced states of excitement ; while the lack of the sense of proportion which allows of the juxtaposition of refined and delicate poetic utterances and indecent and ribald expressions is almost as suggestive of a morbid brain state. It is certain, therefore, that at the time when Blake wrote this curious medley he must have been in an abnormal mental condition. Consequently, we are quite prepared for the suggestion that "he was now about to become altogether a myth-maker" (13). History makes it sufficiently clear that some such period of unstable equilibrium usually precedes the onset of the visionary and prophetic states : witness, for instance, the incident of St. Paul's sudden conversion on the road to Damascus, and Swedenborg's acute breakdown prior to his persistent delusional condition. It is interesting to note that about this time Blake was, to a considerable extent, influenced by Swedenborg. This is obvious in certain of Blake's writings, particularly in the *Marriage of Heaven and Hell*, which appeared in 1790. The very title suggests at once Swedenborg's *Vision of Heaven and Hell*. There is, too, in the British Museum, a copy of Swedenborg's *Angelic Wisdom concerning the Divine Love*, which was published in English in 1787, and which contains numerous marginal notes in Blake's handwriting. It was likely that anyone with the mental tendencies which were characteristic of Blake would be influenced by the mystical theories of the visionary Swedenborg. With the impatience which was so marked in Blake throughout his life, and which led him so frequently to jump to conclusions before he had troubled to arrive at an adequate comprehension of facts, he soon disagreed with Swedenborg, and even in the *Marriage of Heaven and Hell* his attitude is at times antagonistic. Swedenborg's theological writings are, however, clearness itself compared with what Gilchrist describes as the "incoherent rhapsodies" of Blake's later years.

Blake disagreed with Parker in 1787, and the partnership was dissolved; he left the house in Broad Street, and went to live in Poland Street. Whilst there "he received from a dream or vision of his dead brother Robert the invention of the kind of printing in which he published all his autograph books" (14). In 1789 appeared the *Book of Thel*, one of the earliest of the "prophetic" books, and in the following year the *Marriage of Heaven and Hell* was published. It is, as Gilchrist says, "still more mystical" than its predecessor, and it is apparently a record of visions and hallucinations. Here again are noticeable the irrelevance and disconnectedness which characterised so markedly *The Island in the Moon*. Blake informs us that the "Prophets Isaiah and Ezekiel dined with him and that he questioned them, asking them 'how they dared so roundly to assert that God spake to them'"; and he mentions also a visit which he made to a "printing-house in hell," wherein were dragons, a viper, lions, etc.—unusual sights in most well-regulated printing establishments. The presses were presided over, we may presume, by printer's devils! For anyone with the markedly exegetical disposition of the numerous interpreters of the mythology of Blake, and endowed also with a sense of humour, there would be found much material for a satirical exposition of the hidden meaning of this curious work.

The *Marriage of Heaven and Hell* is terminated by a note, which runs as follows: "This angel, who is now become a devil, is my particular friend. We often read the Bible together in its infernal or diabolical sense, which the world shall have if they behave well. I have also the Bible of hell, which the world shall have whether they will or no."

One law for the Lion and the Ox is Oppression. It is this book which Swinburne designates as exhibiting "the high-water mark of his (Blake's) intellect." In his turgid phraseology—"Every sentence bristles with some paradox, every page seethes with the blind foam and surf of stormy doctrine; the humour is of that fierce, grave sort, whose cool insanity of manner is more horrible and more obscure to the Philistine than any sharp edge of burlesque or glitter of irony; it is huge, swift, inexplicable, hardly laughable through its enormity of laughter, hardly significant through its condensation of meaning." It may be said that Swinburne's essay is more

valuable as a revelation of Swinburne than as a criticism of Blake. Had Blake lived to read it he might well have prayed to be defended from his friends !

Other books of a similar character were written by Blake about this time ; more "dreamy books of prophecy," to use Gilchrist's phrase. One, entitled *The French Revolution*, was inspired by the dramatic events which were taking place in France, for Blake was an ardent republican, and walked the streets adorned with the *bonnet-rouge*. Another, which he called the *Visions of the Daughters of Albion*, appeared in 1793. In this book a number of shadowy characters with ill-sounding names, such as Theotormon, Bromion, Oothoon, and Urizen, conduct themselves in such a mysterious manner as to be still a puzzle to the industrious commentators.

In 1793, Blake left Poland Street, where he had resided for five years, and went to live in Lambeth at Hercules Buildings. In 1794 appeared his *Songs of Experience*, in which he returned to the poetical style of the *Songs of Innocence*. A comparison of this book with the dreamy, mystical, often incoherent writings which preceded it, and with similar ones which succeeded it, gives rise to a feeling of keen regret that his mental state did not permit him to continue along the lines of lyrical versification. As a lyric poet, and especially where simplicity and directness are in question, he has seldom been equalled. There is, however, a curious trait in Blake's character as a poet, and one that is noticeable even in the *Songs of Experience* ; it is the manner in which he would allow the most obvious doggerel and imperfect scansion to remain in his poetry, either because he did not notice it, or because he composed and wrote too hastily and would not trouble to revise. Mr. Ellis says that he did not correct his poems because he could not ; the mood of conception had not its needful prolongation into a mood of judgment. "This deficiency in Blake, this critical blindness, was almost always absolute and unconscious like colour-blindness or tone-deafness to others." The same writer goes on to say that this "misfortune cost him friend after friend" (17) ; Blake resented the criticism from others which he was unable to supply himself, and he consequently broke off friendly relationships with those who dared to criticise his productions. It is difficult to conceive how anyone could leave such a verse as the following one unaltered unless he suffered

from mental defect in the direction of critical ability. It occurs in the *Songs of Experience*.

"When the voices of children are heard on the green,
And whisperings are in the dale,
The days of my youth rise fresh in my mind,
My face turns green and pale."

Other passages might be quoted illustrative of the same defect, but this one will suffice to show how Blake, even in what Gilchrist describes as the "more lucid writing" of the *Songs of Experience*, could fail to realise poetical faults, and could allow such a bathetic line as that of the "green and pale" face to remain.

As it was with his poetry, so it was with his drawings and painting. Though he was capable in these directions also of remarkable and strikingly beautiful results, yet here, too, his work suffered from his lack of artistic training, and also from his tendency to exaggeration. Only too frequently the beings whom he depicted are disproportioned, and some of his figures, if they are judged dispassionately, and not with the enthusiastic fervour of devotees who consider everything he did worthy of admiration, and all things that he wrote credible, appear as if they were the handiwork of a tyro in the art of drawing. His colouring, though often delicate and obviously the work of an exceptionally talented artist, was at times crude, amateurish, and evidently done in haste. Ellis describes him as "an in-harmonious colourist, spotty, feeble, and incoherent." Another critic remarks: "It must be confessed that Blake's work suffers from the obsession of certain ill-formed types of humanity, with the cone-shaped heads, the strongly lined brows, the bull necks, the exaggerated and often incorrect undulation of muscle . . . His was a genius where human expression was lamed by an unnatural vividness of spiritual vision, and a ray of real truth is continually followed by the mutterings of the incomprehensible" (17A).

Blake was not at this time in a mood to depreciate his own wares. In 1794, he issued a leaflet in which the following passage occurs: "Mr. Blake's power of invention very early engaged the attention of many persons of eminence and fortune, by whose means he has been regularly enabled to bring before the public works (he is not afraid to say) of equal magnitude

and consequence with the productions of any age or country" (18). Such statements certainly point to a condition of mental exaltation, and Nordau would assuredly designate it by his favourite expression, megalomania. This is not a solitary instance of Blake's self-appreciation; other examples will be given later of a similar character.

In 1794, still more prophetic writings were published with the titles, *Europe* and *Urizen*. The latter is described by Gilchrist, who was an ardent opponent of those who maintained the mental unsoundness of Blake, as "shapeless, unfathomable," and of the *Song of Los*, which appeared in 1795, he remarks that "in it we seem to catch a thread of connected meaning." There are enthusiasts, however, who do not agree with Gilchrist, and who find meanings and an understandable mythus in the prophetic books; but many, in Blake's own words, "avoid the petrific, abominable chaos" (19). In *Urizen*, and indeed in other prophetic books, one gets the feeling of being involved in a horrid nightmare, as if one were in the grip of an incubus—"in a horrible, dreamful slumber," as Blake so aptly expresses it. As there are probably few who venture so far in their reading of Blake as the prophetic books, some excerpts from this particular one may be of interest:

"From the caverns of his jointed Spine
Down sunk with fright a red
Round globe, hot, burning deep,
Deep down in the Abyss;
Panting, Conglobing, Trembling,
Shooting out ten thousand branches
Around his solid bones.

.

In ghastly torment sick,
Within his ribs bloated round,
A craving, Hungry Cavern."

The lines which follow seem like a prophecy of the "Futurist" school of painting:

"And his world teem'd vast enormities,
Fright'ning, faithless, fawning,
Portions of life, similitudes
Of a foot, or a hand, or a head,
Or a heart, or an eye, they swam mischievous,
Dead terrors, delighting in blood" (20).

The term "vast enormities" is, however, not inapplicable to some of Blake's own efforts. In the *Book of Ahania*, which was published in 1795, there are equally horrific passages ;

"The clouds of disease hover'd wide
Around the Immortal in torment,
Perching around the hurtling bones,
Disease on disease, shape on shape,
Winged, screaming in blood and torment.

.
The shapes, screaming, flutter'd vain.
Some combin'd into muscles and glands,
Some organs for craving and lust ;
Most remained in the tormented void ;
Urizen's army of horrors " (21).

Blake has mustered a not inconsiderable "army of horrors" himself, and anyone may be forgiven for hoping that his rest may not be broken by the onrush of the poet's ephialtic squadrons.

It was during the period of Blake's residence at Hercules Buildings that the curious episode relating to the poet's realistic interpretation of his readings in Milton occurred. Gilchrist gives the story on the authority of Mr. Butts, who bought largely of Blake's artistic productions, and who knew him intimately. 'At the end of the little garden in Hercules Buildings there was a summer-house. Mr. Butts, calling one day, found Mr. and Mrs. Blake sitting in this summer-house freed from 'these troublesome disguises' which have prevailed since the Fall. 'Come in!' cried Blake, '*it's only Adam and Eve, you know!*' Husband and wife had been reciting passages from *Paradise Lost* in character, and the garden of Hercules Buildings had to represent the Garden of Eden, a little to the scandal of wondering neighbours on more than one occasion." Gilchrist admits that if others "were on a sudden to wander in so bizarre a fashion from the prescriptive proprieties of life, it would be time for our friends to call in a doctor, or apply for a commission *de lunatico*"; but he excuses such vagaries in Blake because he "lived in a world of ideas ; ideas to him were more real than the actual external world" (22). It is a dangerous excuse, and one which might be made on behalf of many of the insane. They, too, dwell in a world of ideas ; in the usual

terminology the subjective aspect of their mental life is predominant. The person with hallucinations will, more often than not, refuse to believe the statements made to him by others when they contradict the evidence of his "voices" or of his "visions," or when they are in opposition to the monitions of his Socratic "Demon" or "Genius." Thus we find Blake writing in 1799: "I find more and more that my style of designing is a species by itself, and in this which I send you have been compelled by my Genius or Angel to follow where he led" (23).

His dead brother, Robert, who, according to Blake, revealed to him the method of etching which he employed in the illuminated books, acted to some extent as his invisible monitor. In this same year, he wrote to Hayley: "I know our deceased friends are more really with us than when they were apparent to our mortal part. Thirteen years ago I lost a brother, and with his spirit I converse daily and hourly in the spirit, and see him in my remembrance, in the regions of my imagination. I hear his advice, and even now write from his dictate" (24).

During the summer of 1800, Blake experienced a period of depression. There is evidence of this in a letter which he wrote in July of that year: "I begin to emerge from a deep pit of melancholy—melancholy without any real reason—a disease which God keep you from" (25). By the time that September arrived, he was again cheerful; in a letter to Flaxman, the sculptor, he speaks of his "present happiness," and says that "the time has arrived when men shall again converse in Heaven and walk with angels." There are references in the same letter to the troubled mental phase through which he had recently passed:

"Paracelsus and Behmen appeared to me, terrors appeared in the
Heavens above,
And in Hell beneath, and a mighty and awful change threatened the
Earth.
The American War began. All its dark horrors passed before my face
Across the Atlantic to France. Then the French Revolution commenced in thick clouds,
And my Angels have told me that seeing such visions I could not
subsist on the Earth,
But by my conjunction with Flaxman, who knows to forgive nervous
fear" (26).

Later, in the month of September, 1800, Blake and his wife left Hercules Buildings and went to reside at Felpham in Sussex. This change of residence is said to have been brought about at the suggestion of William Hayley, author of *The Triumphs of Temper*, biographer of Romney and of Milton, and essayist, who was living close to Felpham at this time. Hayley was engaged in writing a biography of his friend the poet Cowper, who died in April, 1800; and he was desirous that Blake should engrave the plates for the illustration of his work. During the early part of Blake's stay at Felpham the relations between the two men were of the most friendly character. Hayley was a kindly-natured man, and, in addition to being an author himself, was apparently anxious to play in a small way the part of Mæcenas. He has been systematically abused by several of those who have written about Blake in an obviously partisan manner, because a quarrel took place between the two, or rather because, according to Blake's statements, he resented certain of Hayley's criticisms. Swinburne, in his misguided essay on Blake, is the worst offender in this respect. All these writers, although they were aware of Blake's irritability and of, at times, his morbid suspiciousness in regard to certain people, have apparently chosen to overlook these traits in his character. Here again was a marked inconsistency in Blake's character: although keenly desirous of the friendship of others, he quarrelled with many of his friends⁽¹⁾, and, apparently, for no adequate reason. At least his biographers for the most part do not seem to be able to give the reason, but, in default of that, they seize upon anything that might seem to justify Blake in his estrangements, even if by so doing they have to deal hardly with those with whom he quarrelled. They would have been more just to Blake and to his friends if they had been prepared to admit that these troubles arose for the most part from the inherent mental instability from which Blake suffered.

Blake wrote to Flaxman soon after his arrival in Felpham, and from that letter it may be judged that he was pleased with his new surroundings, and also that his "visions" and his "voices" had not by any means departed from him. "Felpham is a sweet place for study, because it is more spiritual than London. Heaven opens here on all sides her golden gates; her windows are not obstructed by vapours; voices of celestial inhabitants are most distinctly heard, and their forms more

distinctly seen ; and my cottage is also a shadow of their houses." In the same letter there is a passage which clearly shows the exalted state which characterised him at this time : " I am more famed in Heaven for my works than I could well conceive. In my brain are studies and chambers filled with books and pictures of old, which I wrote and painted in ages of eternity before my mortal life ; and those works are the delight and study of archangels " (27). Later in the year, the same elated mood is apparent in his letters : " Time flies very fast and very merrily. I sometimes try to be miserable that I may do more work, but find it is a foolish experiment " ; and in May of the following year (1801) he wrote : " Mr. Hayley acts like a prince. I am at complete ease." In September, 1801, there is an interesting passage in one of his letters which gives much insight into his mental state : " I labour incessantly. I accomplish not one half of what I intend, because my abstract folly hurries me often away while I am at work, carrying me over mountains and valleys, which are not real, into a land of abstraction where spectres of the dead wander. This I endeavour to prevent ; I, with all my whole might, chain my feet to the world of duty and reality. But in vain ! the faster I bind, the better is the ballast ; for I, so far from being bound down, take the world with me in my flights, and often it seems lighter than a ball of wool rolled by the wind. . . . But as none on earth can give mental distress, and I know all distress inflicted by Heaven is a mercy, a fig for all corporeal. Alas ! wretched, happy, ineffectual labourer of Time's moments that I am ! Who shall deliver me from this spirit of abstraction and improvidence ? " (28) In a previous letter, he had written of his visions by the sea-shore of " Heavenly men beaming bright," who appeared as " One man," and spoke to him. But when January, 1802, arrived, his mood was one of despondency ; and the close application to work, which Hayley apparently suggested, did not suit Blake's increasingly restive state. He regarded the suggestion suspiciously because of the commands which his spiritual monitors had issued to him, which were that he should busy himself in other ways than those which the practical Hayley recommended. " When I came down here," he wrote, " I was more sanguine than I am at present." He thought that Hayley would, however, be able to lift him out of difficulty, although this would be no easy matter in the case of

one such as himself, who, "having spiritual enemies of such formidable magnitude, cannot expect to want natural hidden ones." He objected to routine work; he looked upon it as his duty "to lay up treasures in Heaven" in fulfilling the behests of the voices. Their commands were issued frequently: "I am under the direction of messengers from Heaven, daily and nightly." How true the sentence is which follows: "But the nature of such things is not, as some suppose, without trouble or care." Those whose work brings them in daily association with men and women who are influenced by "voices"—auditory hallucinations—can certainly testify to the truth of such a statement. It is remarkable, too, how seldom the "voices" direct these persons to the performance of reasonable actions. In Blake's case, it is difficult to see why he should not have been instructed to direct some of his energies towards earning the means of subsistence for his wife and for himself. It does not seem unreasonable to suggest that in this way also he might have laid up treasure in Heaven!

Towards the end of the year 1802, Blake was able to write more cheerfully; the dark mood had passed, and he was again experiencing exaltation. "I have been very unhappy, I am so no longer. I am again emerged into the light of day. . . . I have travelled through perils and darkness not unlike a champion. I have conquered, and shall go on conquering. Nothing can withstand the fury of my course among the stars of God and in the abysses of the accuser" (29). But he evidently was still desirous of returning to London. In a letter written in April, 1803, he asked Mr. Butts to congratulate him in the prospect of an early return thereto: "Now I may say to you . . . that I can alone carry on my visionary studies in London unannoyed, and that I may converse with my friends in eternity, see visions, dream dreams, and prophesy and speak parables unobserved." In the same letter, he speaks of a work upon which he has been engaged, a poem entitled *Milton*. In his characteristic manner he thus describes how it was conceived: "None can know the spiritual acts of my three years' slumber on the banks of ocean, unless he has seen them in the spirit, or unless he should read my long poem descriptive of those acts; for I have in these years composed an immense number of verses on one grand theme, similar to Homer's *Iliad* or Milton's *Paradise Lost*; the persons and machinery entirely new to the inhabitants of the

earth (some of the persons excepted). I have written this poem from immediate dictation, twelve or sometimes twenty or thirty lines at a time, without premeditation, and even against my will. The time it has taken in writing was thus rendered non-existent, and an immense poem exists, which seems to be the labour of a long life, all produced without labour or study. I mention this to show you what I think the grand reason of my being brought down here." Another poem, or another portion of the same immense poem, was published later with the title of *Jerusalem*. Blake describes it as a "sublime allegory," and considers it as "the grandest poem that this world contains." If one accepts his definition of the most sublime poetry as "allegory addressed to the intellectual powers, while it is altogether hidden from the corporeal understanding," it may be granted that he was justified in his claim to a superlative degree of merit. He did not, however, take any praise to himself for these writings: "The authors are in eternity," and he was only "the secretary" who wrote at their dictation. Even the perfervid Swinburne boggled at these poems: "Human readers, if such indeed exist beyond the singular or the dual number, will wish that the authors had put themselves through a previous course of surgical or any other training which might have cured a certain superhuman impediment of speech, very perplexing to the mundane ear; a habit of huge, breathless stuttering, as it were a Titanic stammer, intolerable to organs of flesh" (30). The evolutions of the characters in *Milton* are certainly perplexing, but what is one to expect from, for instance, the dwellers in a town named Golgonooza, or what else than dyspepsia could arise from "Bowlahoola," which is "the stomach in every individual man." Imagine Enitharmon with a pain in his Bowlahoola! It is difficult to refrain from levity when one considers the wild welter of verbiage in such a poem as this; it is so reminiscent of "Jabberwocky" that it stimulates the risible faculties—if one may be allowed the phrase. Consider the following invocation:

"Arise, O Sons, give all your strength against Eternal Death,
 Lest we are vegetated, for Cathedron's Looms weave only Death,
 A Web of Death, and were it not for Bowlahoola and Allamanda,
 No Human Form, but only a Fibrous Vegetation,
 A Polypus of soft affections without Thought or Vision
 Must tremble in the Heavens and Earths thro' all the Ulro space,
 Throw all the Vegetated Mortals into Bowlahoola."

The carnivorous mortals would perhaps prefer to read vegetarian for vegetated in the last line!

In another place we read of a motley gathering, chiefly of insects, which dances round "the Wine-presses of Luvah":

"The Earwig arm'd ; the tender Maggot, emblem of immortality ;
The Flea, Louse, Bug, the Tape-worm, all the Armies of Disease ;
Visible or invisible to the slothful, vegetating man ;
The slow Slug ; the Grasshopper, that sings and laughs and drinks.
Winter comes : he folds his slender bones without a murmur " (32).

The Earth-worm is there also in company with the Nettle and the "indignant Thistle." It all sounds more like the vision of someone who had been dancing too near to the wine-presses.

In this poem, *Milton*, there occurs a passage which evidently refers to a seizure or fit during his stay at Felpham, or, as Ellis describes it, he was overwrought by visionary fancy.

"My bones trembled, I fell outstretch'd upon the path
A moment, and my Soul return'd into its mortal state,
So Resurrection and Judgment in the Vegetable Body,
And my sweet Shadow of Delight stood trembling by my side." (33)

It was probably also while he was at Felpham, according to Ellis, that, in a vision, Cowper came to Blake and said: "O that I were insane always! I will never rest till I am so. You retain health, and yet are as mad as any of us all—mad as a refuge from Bacon, Newton, and Locke."

In the summer of 1803, Blake was unfortunately involved in a troublesome affair which led to his being tried for sedition. A drunken soldier blundered into Blake's garden and, when requested to leave, became offensive and impertinent. Whereupon Blake incontinently took him by the elbows, marched him out, and "pushed him forward down the road about fifty yards." This drunken blusterer, in a spirit of revenge, preferred a charge against Blake of having used seditious language during the encounter, wherein he was supported by a "perjured comrade." The trial, needless to say, resulted in a verdict in Blake's favour, but this incident naturally tended to prejudice him still further against the district. With his tendency to ascribe his mischances to some persecutionary scheme, Blake looked upon this affair as being of the nature of a subtle plot ;

he "used to declare the Government, or some high person, sent the soldier to entrap him." In company with Gilchrist we may "take the liberty of regarding this as a purely visionary notion" (35).

From what has been stated it will be obvious that Blake's mental condition during the period of his stay at Felpham was one of marked instability. Even those who resent the ascription to him of the term "insane" admit this. "By the sounding shore," says Gilchrist, "visionary conversations were held with many a majestic shadow from the past—Moses and the Prophets, Homer, Dante, Milton." Swinburne says "that too much of Blake's written work while at Felpham is wanting in executive quality, and even in decent coherence of verbal dress, is undeniable"; and adds that "everything now written in the fitful impatient intervals of the day's work bears the stamp of an over-heated brain, and of nerves too intensely strung." Swinburne has, however, his own method of accounting for this. It was due to the "sudden country life, the taste and savour of the sea," which "touch sharply and irritate deliciously the more susceptible and intricate organs of mind and nature. How far such passive capacity of excitement differs from insanity; how in effect a temperament so sensuous, so receptive, and so passionate, is further off from any risk of turning unsound than hardier natures carrying heavier weight and tougher in the nerves, need scarcely be indicated" (36). What does scarcely need to be indicated, after reading such passages as these, is that Swinburne was little competent to give a reasoned opinion on the matter of Blake's mental unsoundness. Only prejudice could have allowed him to draw such a conclusion from the evidence which he himself gives. The last part of the passage quoted is perilously like nonsense.

Flaxman, who also resented any imputation of insanity to Blake, states, in a letter to Hayley in 1804, that "Blake's irritability, as well as the association and arrangement of his ideas, do not seem likely to be soothed or more advantageously disposed by any power inferior to That by which man is originally endowed with his faculties" (37). Mr. Ellis speaks of the "deplorable and hasty state of the drawings towards the close of *Milton*"; and he adds that "they betray worn-out patience, jarred nerves, and a distracted mind" (38). Gilchrist,

another ardent advocate of Blake's sanity, comments as follows on *Jerusalem* : "Dark oracles, words empty of meaning to all but him who uttered them," and again he describes it as "Such a chaos of words, names, and images, that, as the eye wanders, hopeless and dispirited, up and down the large, closely written pages, the mind cannot but busy itself with the question, how a man of Blake's high gifts ever came to produce such ; nay, to consider this, as he really did, his greatest work." In regard to the *Milton* his comment is : "As this work has no perceptible affinity with its title, so the designs it contains seem unconnected with the text" (39). In such a way will prejudice—or ignorance of the inferences as to disordered brain function which may be drawn from certain symptoms—blind critics, and prevent them from giving a verdict in accordance with the evidence.

Blake returned to London in the autumn of 1803 ; he took lodgings in South Molton Street, and there he continued to reside until 1821. The exaltation and fervour seemed for a short time to have abated. Then in October, 1804, he writes to Hayley a letter in which the following passages occur : "For now ! O Glory ! and O Delight ! I have entirely reduced that spectrous fiend to his station, whose annoyance has been the ruin of my labours for the last passed twenty years of my life. He is the enemy of conjugal love, and is the Jupiter of the Greeks, an iron-hearted tyrant, the ruiner of ancient Greece. I speak with perfect confidence and certainty of the fact which has passed upon me. Nebuchadnezzar had seven times passed over him ; I have had twenty. Thank God I was not altogether a beast as he was, but I was a slave bound in a mill among beasts and devils. These beasts and these devils are now, together with myself, become children of light and liberty, and my feet and my wife's feet are free from fetters. O lovely Felpham, parent of immortal friendship, to thee I am eternally indebted for my three years' rest from perturbation and the strength I now enjoy. Suddenly . . . I was again enlightened with the light I enjoyed in my youth, and which has for exactly twenty years been closed from me as by a door and by window shutters." He goes on to speak of having received "spiritual aid" from Romney, and continues : "He is become my servant who domineered over me, he is even as a brother who was my enemy. Dear Sir, excuse my enthusiasm or rather madness, for I am really

drunk with intellectual vision whenever I take a pencil or graver into my hand . . . I am now satisfied and proud of my work " (40).

In December, 1805, Blake writes to Hayley much in the same strain: "You, dear Sir, are one who has my particular gratitude, having conducted me through three that would have been the darkest years that ever mortal suffered, which were rendered through your means a mild and pleasant slumber. I speak of spiritual things, not of natural, of things known only to myself and to spirits good and evil, but not known to men on earth. It is the passage through these three years that has brought me into my present state, and I *know* that if I had not been with you I must have perished" (41). Yet within a very short time and for no adequate reason Blake broke with Hayley; the feeling of acute suspiciousness in regard to the motives of others recurred. And in the same way he came to regard Flaxman as one who was working against him. "Blake, with a burst of fury, decided," says Mr. Ellis, "that they were not friends at all, since they had been, while pretending to patronise him, quietly conspiring to reduce his prices" (42). Why they should have so conspired it is difficult to understand, and, indeed, there does not seem to be any reason to believe that there was any adequate basis for such an idea other than in Blake's morbid imaginings. In much the same way Blake's friendship with Stothard came to an end in 1808. Blake had made a drawing of Chaucer's *Canterbury Pilgrims*, and this drawing was apparently left about in his room at South Molton Street. There it was seen by a visitor who was acquainted with Stothard; this visitor, whose name was Cromeck, had been an engraver, a pupil of Bartolozzi, but had given up engraving to become a publisher. It was Cromeck who had bought from Blake the designs to Blair's *Grave*. There was apparently an understanding—on Blake's part, at any rate—that in addition to designing these drawings, the artist should also engrave them. Cromeck, however, gave this part of the work to Schiavonetti—an exceedingly able engraver—and Blake was furiously angry with him for so doing. He wrote him an "insulting letter," and demanded more money; "Blake," says Mr. Ellis, "when not affectionately polite, was ferociously offensive." Another inconsistency showed itself in Blake during this incident; although he posed as a money hater, he began to "wrangle

abusively for more pay" (43). Accordingly he quarrelled with Cromek, and much abuse has been levelled at Cromek by Gilchrist, Swinburne, and others. Cromek, then, having seen Blake's sketch of the *Canterbury Pilgrims*, called upon Stothard and may have spoken to him about it, or it is possible that Blake may have mentioned it to Stothard himself. However it may have been, we know that Stothard painted the well-known picture with the same title which is now in the National Gallery. According to Mr. Ellis, Blake had called on Stothard whilst the latter was engaged in painting this picture, "saw him at work," and politely praised "anything that he could praise in the work." Yet when Stothard's picture did actually appear Blake again felt that he had been betrayed and injured; he became incensed with Stothard, and this friendship, too, came to an end. He even developed persecutionary ideas in regard to Stothard. Blake had hung his original design of the *Canterbury Pilgrims* over a door in his sitting-room, "where, for a year perhaps, it remained." When, on the appearance of Stothard's picture, he went to take down his drawing, he found it nearly effaced, "the result of some malignant spell of Stothard's, he would, in telling the story, assure his friends." Whereupon Flaxman is stated to have expostulated with him, pointing out that if a pencil drawing were left exposed so long to air and dust, he could hardly expect any other result.

Gilchrist states that the quarrel with Cromek and with Stothard left Blake "more tetchy than ever; more disposed to wilful exaggeration of individualities already too prominent, more prone to unmeasured violence of expression," and he goes on to say that "the extremes he again gave way to in his design and writings—mere ravings to such as had no key to them—did him no good with that part of the public the illustrated *Blair* had introduced him to." Then, evidently feeling that such statements might give rise to a suspicion that all was not well with Blake's mental state, he goes on to say that, though there was "now established for him the damaging reputation, 'mad,' by which the world has since agreed to recognise William Blake," he maintains that he was certainly not so, preferring apparently that Blake should be held responsible for his waywardness, irritability, and quarrelsomeness.

There is, however, other evidence of Blake's disordered mental state about this time. There is, for instance, a quotation from

a note-book of Blake's which is suggestive. It apparently refers to Stothard, who, we are told, had a long nose. It is as follows: "I always thought Christ was a snubby, or I should not have worshipped him, if I had thought he had been one of those long spindle-nosed rascals." With his irritability there was again a progressive exaltation, and it is interesting to note that prior to this there had been a period of profound dejection. In his note-book, under the date "Tuesday, Jan. 7, 1807," there is an entry—"Between two and seven in the evening: Despair," and Mr. Ellis states that "Blake had lately been reduced to one of his fits of deep melancholy at this time" (45). Now the feeling of elation had returned to him again. In 1809, he held an exhibition of some of his pictures, and in the "descriptive catalogue" which he drew up the following statements occur: "These pictures . . . were the result of temptations and perturbations, seeking to destroy imaginative power, by means of that infernal machine called Chiaro Oscuro, in the hands of Venetian and Flemish Demons, whose enmity to the Painter himself, and to all Artists who study the Florentine and Roman schools, may be removed by an exhibition and exposure of their vile tricks"; and, again, of certain of his drawings he says that he wishes they were "in Fresco on an enlarged scale to ornament the altars and churches, and to make England, like Italy, respected by respectable men of other countries on account of Art. It is not want of Genius that can hereafter be laid to our charge." Of another picture he remarks: "Hence Rubens, Titian, Correggio, and all of that class are like leather and chalk. Their men are like leather and their women are like chalk, for the disposition of their forms will not admit of grand colouring. In Mr. B.'s Britons the blood is seen to circulate in their limbs; he defies competition in colouring." There is another distinct reference in the same catalogue to his "persecutors"; describing another of his pictures, he says that "Fortunately, or rather, providentially, he left it unblotted and unblurred, although molested continually by blotting and blurring demons." In regard to the catalogue itself, he proclaims that "All these things are written in Eden. The artist is an inhabitant of that happy country, and if everything goes on as it has begun, the world of vegetation and generation may expect to be opened again to Heaven, through Eden, as it was in the beginning" (46). From these extracts, it is obvious that Blake's mental condition was one of marked

exaltation ; in addition to the megalomaniacal fervour there is quite definite evidence of influence by persecutionary ideas. That the artist's opinion of the pictures in his exhibition was not shared by one at least of the critics of the time an extract from the *Examiner* at that time makes quite clear. This paper was well known for its outspokenness, and it may be remembered that Leigh Hunt, who edited it, was imprisoned for having in its columns described the Prince Regent as "a fat Adonis of fifty." The writer describes Blake as "an unfortunate lunatic, whose personal inoffensiveness secures him from confinement," and he goes on to say : "The poor man fancies himself a great master, and has painted a few wretched pictures, some of which are unintelligible allegory, others an attempt at sober character by caricature representation, and the whole 'blotted and blurred' and very badly drawn. These he calls an Exhibition, of which he has published a Catalogue, or rather a farrago of nonsense, unintelligibleness, and egregious vanity, the wild effusions of a distempered brain " (47).

It was not only in this catalogue that Blake made manifest the morbid exaltation which characterised him during this period. Subsequent to it there is ascribed to him what Mr. Ellis describes as "a misguided prose document," entitled a *Public Address*. Those who can say that it is not the product of a "distempered brain," and who will, therefore, be unable to pity the state of the unfortunate man, are left with the unpleasant alternative of ascribing it to "egregious vanity." Such passages as the following occur in this curious production : "Mr. Blake's inventive powers and his scientific knowledge of drawing are on all hands acknowledged."—"I do not shrink from comparison in either relief or strength of colour with Rembrandt or Rubens ; on the contrary, I court the comparison and fear not the results."—"If all the princes of Europe, like Louis XIV and Charles I, were to patronise such blockheads, I, William Blake, mental prince, would decollate and hang their souls as guilty of mental high treason."—"I do pretend to paint finer than Rubens, or Rembrandt, or Titian, or Coreggio." There is a passage in this address which appears to show that Blake was aware of the opinion which many held in regard to his mental state. "It is very true," he says, "what you have said for these thirty years ; I am mad, or else you are" (48).

This was about the year 1810, and of the following six years

there does not appear to be any definite record. According to Gilchrist he was still living in South Molton Street, "in his accustomed poverty, and, if possible, more than accustomed neglect." Apparently he continued his work during this time: "Scores of MSS. were produced," says Gilchrist, "which never got beyond MS., and have since been scattered, most of them destroyed or lost." Gilchrist adds the significant comment—"He could find no publisher here for writing or design." It is greatly to be regretted that the information is lacking which would throw light upon this period; it may be that the exaltation already noted may have been succeeded again for a time by depression. A passage in Gilchrist seems to bear this out. According to the biographer Blake kept very much to his own house; and for "two years together [he] never went out at all, except to the corner of the Court to fetch his porter" (49).

In 1818, Blake became acquainted with Linnell the artist; and the latter thus speaks of Blake as he found him at this time: "I soon encountered Blake's peculiarities, and, somewhat taken aback by the boldness of some of his assertions, I never saw anything the least like madness, for I never opposed him spitefully, as many did, but being really anxious to fathom, if possible, the amount of truth which might be in his most startling assertions, generally met with a sufficiently rational explanation in the most really friendly and conciliatory tone" (50). From which we may see that, even with all his anxiety, Linnell was not always able to fathom the "startling assertions" of his friend; nor does he state that he was able to obtain more than a "sufficiently rational" explanation of them. However, it may suffice to note here that even such a champion as Linnell, of the opinion that Blake showed no sign of madness, was quick to perceive his "peculiarities." Linnell introduced Blake to an artist friend, John Varley, whom Gilchrist describes as a "remarkable man, of very pronounced character and eccentricities." He was, in addition to being a landscape-painter, a "professional astrologer"; and he was, moreover, "superstitious and credulous." It was the credulous Varley, who, placing "implicit and literal credence" in Blake's stories of his intercourse with the spirit world, encouraged him to make the sketches of his "visitants" which are known as the "Visionary Heads." Allan Cunningham, who had his account from Varley, thus describes their production: "The most propitious

time for those 'angel visits' was from nine at night till five in the morning; and so docile were his spiritual sitters that they appeared at the wish of his friends. Sometimes, however, the shape with which he tried to draw was long in appearing, and he sat with his pencil and paper ready, and his eyes idly roaming in vacancy; all at once the vision came upon him, and he began to work like one possessed" (51). As might be expected, Blake produced a varied assortment of portraits; among them one of the best known is that which has been called the *Ghost of a Flea*. It is a fearsome object and worthy of a place in the most lurid nightmare. During the time occupied in completing the drawing, the flea told Blake, according to the credulous Varley, "that all fleas were inhabited by the souls of such men as were by nature blood-thirsty to excess, and were, therefore, providentially confined to the size and form of insects; otherwise, were he himself, for instance, the size of a horse, he would depopulate a great portion of the country" (52).

Other visions appeared to Blake at this time, and among them was one of Satan. "For many years," said Blake, "I longed to see Satan. . . . At last I saw him. I was going upstairs in the dark, when suddenly a light came streaming amongst my feet; I turned round, and there he was looking fiercely at me through the iron grating of my staircase window." Blake, undaunted by the gruesome spectre, got a piece of paper and sketched it. "Its eyes were large and like live coals, its teeth as long as those of a harrow," says Cunningham, "and the claws seemed such as might appear in the distempered dream of a clerk in the Herald's office" (53). In addition to a deal of fantastic work such as this Blake did, however, continue to produce other pictures of a very different character, notably his illustrations of the Book of Job. These were executed for his staunch supporter, Mr. Butts. Even this patron, however, seems to have found Blake's ways somewhat trying. "Even his old friend, Mr. Butts, a friend of more than thirty years' standing, the possessor of his best *temperas* and water-colour drawings, and of copies of all of his engraved books, grew cool," says Gilchrist. "The patron had often found it a hard matter *not* to offend the independent, wilful painter. . . . The patron had himself begun to take offence at Blake's quick resentment of well meant, if blunt,

advice and at the unmeasured violence of his speech when provoked by opposition" (54).

Much interesting information in regard to these later years of Blake's life is to be found in the Diary of Henry Crabb Robinson. In one of the earliest of the entries relating to Blake, and under the date 1810, he says: "I amused myself this spring by writing an account of the insane poet, painter, and engraver, Blake" (55). Again, in 1811, he refers to meeting Southey and says: "Southey had been with Blake and admired both his designs and his poetic talents. At the same time he held him to be a decided madman. Blake, he said, spoke of his visions with the diffidence which is usual with such people, and he did not seem to expect that he should be believed. He showed Southey a perfectly mad poem called *Jerusalem*. Oxford Street is in Jerusalem." In 1815, the diarist records a remark made by Blake to Flaxman to the effect that "he had had a violent dispute with the angels on some subject, and had driven them away" (56). In 1825, Crabb Robinson met Blake, and from that period there are numerous references to him in the diary. In December of that year, the diarist records a conversation with Blake: "Shall I call Blake artist, genius, mystic, or madman? Probably he is all . . . He spoke of his paintings as being what he had seen in his visions. And when he said 'my visions' it was in the ordinary unemphatic tone in which we speak of every-day matters. In the same tone he said repeatedly, 'The Spirit told me.' I took occasion to say, 'You express yourself as Socrates used to do. What resemblance do you suppose there is between your spirit and his?' 'The same as between our countenances.' He paused and added, 'I was Socrates,' and then, as if correcting himself, said, 'a sort of brother. I must have had conversations with him. So I had with Jesus Christ. I have an obscure recollection of having been with both of them.' Later Blake remarked: 'I have conversed with the spiritual Sun. I saw him on Primrose Hill. He said, 'Do you take me for the Greek Apollo?' 'No,' I said, 'that (pointing to the sky) is the Greek Apollo. He is Satan'" (57). Later in the same month, Robinson makes note of visits made by him to Blake, who was then living at Fountain Court, Strand. The artist's circumstances were very straitened, and, says Robinson,

"nothing could exceed the squalid air both of the apartment and his dress." On one of these occasions, Blake spoke of Milton appearing to him, and he stated also that he had had his faculty of vision "from his early infancy." In February, 1826, of another visit to Blake it is noted that the artist spoke of having had much conversation with Voltaire, and when his interlocutor asked him why he did not draw the forms of his visitants he replied, "It is not worth while. There are so many, the labour would be too great." On the same occasion Blake remarked, "I write when commanded by the spirits, and the moment I have written I see the words fly about the room in all directions" (58). In a letter to Wordsworth's sister, written in February, 1826, Crabb Robinson mentions Blake. "I gave your brother," he says, "some poems in MS. by him, and they interested him, as well they might, for there is an affinity between them, as there is between the regulated imagination of a wise poet and the incoherent outpourings of a dreamer. He (Blake) has lived in obscurity and poverty, to which the constant hallucinations in which he lives have doomed him . . . He is not so much a disciple of Jacob Böhme and Swedenborg as a fellow-visionary. He lives as they did, in a world of his own, enjoying constant intercourse with the world of spirits. He receives visits from Shakespeare, Milton, Dante, Voltaire, etc., and has given me repeatedly their very words in their conversations. His paintings are copies of what he sees in his visions. His books . . . are dictations from the spirits" (59). In June of the same year, the following entry occurs: "Called early on Blake. He was as wild as ever, with no great novelty. He talked, as usual, of the spirits, asserted that he had committed many murders."

Blake had continued to work during these latter years of his life with the same industry that had ever characterised him. Crabb Robinson mentions a large number of MSS., but many of these appear to have been destroyed, and, during this period, he produced—amongst other artistic works—the illustrations of Dante. But, in 1826, his health was failing; there was abdominal trouble, the nature of which—as far as can be judged from the accounts which remain—was probably cancerous. In his letters from 1826 onwards, Blake makes references to such symptoms as acute pain, and "that sickness to which

there is no name," and, at another time, he refers to his jaundiced state. Writing to Linnell, who had suggested that he should migrate to Hampstead, he says: "I have thought and thought of the removal. I cannot get my mind out of a state of terrible fear at such a step. The more I think, the more I feel terror at what I wished at first, and thought a thing of benefit and good hope. You will attribute it to its right cause—intellectual peculiarity, that must be myself alone shut up in myself, or reduced to nothing. I could tell you of visions and dreams upon the subject." This was in February, 1827; he became gradually weaker and died in August of the same year.*

* There appears to be some confusion in regard to the question as to whether Blake was at one time an inmate of Bethlem Hospital. Brierre de Boismont's account of a patient whom he describes as Blake *the Seer* appears almost obviously to refer to William Blake, except that towards the end of it he speaks of him as "a tall man." William Blake was, however, short; according to Gilchrist he was "low in stature, not quite five feet and a half." Timbs, in his *English Eccentrics*, accepts de Boismont's statements as to Blake's residence in Bethlem; and the same writer says that Blake's mind, about the period of his residence at Felpham, "was confirmed in that extraordinary state which many suppose to have been a state of chronic insanity." Dr. Charles Elam, in *A Physician's Problems*, has a description which he applies to this same Blake *the Seer*, and he adduces the evidence of Dr. Wigan, who, however, speaks of the artist as having been "thirty years in an asylum," and as being a portrait painter. Mr. Ellis mentions the fact that William Blake "of the Prophetic Poems" has been identified with this other Blake, but he speaks of it as an error. Mr. E. G. O'Donoghue, the author of an admirable history of Bethlem Hospital, informs me that he has been unable to ascertain that Blake was at any time a patient there. There is no mention of Blake having been a patient in that hospital by Gilchrist, Symons, Wilkinson, Tatham, or by any of the other biographers as far as can be ascertained. Brierre de Boismont refers to an article in the *Revue Britannique* dated July, 1823 (this must be a mistake for 1825, as the *Revue* did not commence until then). The copy of the *Revue* in the British Museum has the June and August numbers, but not the one for July, so that it has not been possible in the meantime to ascertain from what source the *Revue* obtained its information. In Bryan's *Dictionary of Painters and Engravers* there is, however, a reference to a B. Blake, who was a painter of still life, birds, fish, etc., and who copied works of the Dutch painters. "Little of his history is known," the account given of him there states: he was apparently rather dissipated and a spendthrift. He is said to have died "about the year 1830." Curiously enough there is no mention of this Blake in the *Dictionary of National Biography*. Bryan also mentions a Nicholas Blake, an engraver, who illustrated Hanway's *Travels in Russia*, and published an edition of Pope's poems in 1753. This Blake is stated to have lived many years in Paris and to have died about the end of the eighteenth century. Altogether the evidence is against the supposition that Blake was a patient in Bethlem. Mr. O'Donoghue is making further researches into the matter, and it will certainly be interesting to learn whether anyone called Blake, who was an artist and an engraver, resided there during the first quarter of the nineteenth century—or late in the eighteenth century.

[Brierre de Boismont, *On Hallucinations*, p. 83, Eng. trans, London, 1859. Ellis, *op. cit.*, p. 45. Gilchrist, *op. cit.*, vol. i, p. 315. Elam, Charles, *A Physician's Problems*, pp. 299 and 336, London, 1869. Wigan, A. L., *The Duality of the Mind*, pp. 125, 169, London, 1844. Timbs, John, *English Eccentrics and Eccentricities*, p. 345, new ed., London, 1877. Wilkinson, Dr. J. J. Garth, Preface to *Songs of Innocence and Experience*, London, 1839. Bryan, Michael, *Dictionary of Painters and Engravers*, articles: "Blake," London, 1849; new ed., 1904.]

III.

From the evidence which has been adduced it would seem that no injustice is done when the statement is made that Blake exhibited symptoms indicating marked mental instability. Yet there are many who resent the application of the term "insane" to him. It appears, however, to be rather a matter of phraseology, for, while most of them admit the presence of morbid mental symptoms, they do not wish to accept the logical conclusion which such an admission leads to, namely, that the person who does display such symptoms is of unsound mind. The recognition of such disordered mental states when they lead to some infraction of the legal code is admitted by all to be a matter of importance, and the plea of *non compos* is readily urged. Insanity has, however, usually to exhibit itself in some outrageous or extravagant manner before it is admitted as such by most laymen. Unless the conduct of the insane person is annoying or detrimental to his neighbours, the latter will not seek to restrain him; but should the one "disordered in his wits" become troublesome, the aid of the alienist and the assistance of the law will be speedily invoked. We can most of us contemplate with a fair amount of equanimity the worries and irritations to which others are subjected, but we soon resent such troubles when they come our way. "*Nous avons tous,*" says La Rochefoucauld, "*assez de force pour supporter les maux d'autrui.*"

The recognition of the fact that such symptoms as those exhibited by Blake are evidential of mental derangement is not a matter of purely academic interest; nor is the assertion that he was at times so greatly the victim of his unstable nervous organisation as to merit the statement that he was definitely of unsound mind made heedlessly or merely in a spirit of contradiction. A great principle is at stake when we are asked to admit that the hallucinations and delusions of any man—however eminent—are not such, but that they are clear evidence of the objective reality of what he sees and hears, and that therefore the beliefs which he arrives at are rational and credible. It has taken centuries even to initiate what we believe to be a scientific conception as to the origin of such disorderly mental processes, namely, that they are the outcome of deranged

cerebral functioning. Primitive animistic beliefs in regard to the malign influence of hostile spirits, which were held by our early ancestors, and which still dominate the conduct of many savage tribes, have slowly faded out of our scheme of causation. Demoniacal possession, and its correlated horrors in regard to the treatment of the insane, have been fought and driven out inch by inch by the advancing forces of rational thought. Yet still there are those who would cast all these gains away and return to the halcyon days of those golden ages when human blood had to be shed in order to propitiate the angry deities who then ruled the minds of men, or to the times when men and women had to be scourged and beaten until their suffering frames should prove uncomfortable resting-places for the demons who inhabited them. It is idle to say that this is an exaggerated picture, and that there is no logical sequence between those beliefs and the ones which are held by modern spiritualists, and by those who maintain the veridical nature of Blake's "visions" and "voices." The continuance of such beliefs is too obvious to need demonstration, and the recrudescence of certain popular delusionary ideas is so marked as almost to make one fear that there may be in the future a reversion to the belief in witches, warlocks, and demons. Tylor, in his masterly survey of primitive custom and belief, has noted this tendency to recrudescence; speaking of witchcraft, and "the persecution necessarily ensuing upon such belief," he says that "any one who fancies from their present disappearance that they have necessarily disappeared for ever must read history to little purpose, and has yet to learn that 'revival in culture' is something more than an empty pedantic phrase. Our own time has revived a group of beliefs and practices which have their roots deep in the very stratum of early philosophy where witchcraft makes its first appearance. This group of beliefs and practices constitutes what is commonly known as Spiritualism" (60).

It has been noted above that the conflict of opinion in regard to the question of Blake's sanity is greatly a matter of phraseology. Those who maintain that he was of sound mind ascribe to him symptoms and modes of conduct which are not usually associated with the sane state. To some extent this has already been made clear. It may not be uninteresting to exemplify still further the descriptions given by such writers as Gilchrist, Swinburne, and others who uphold the contention that Blake

was sane, and to add also the testimony of those who take up an opposite point of view.

Gilchrist, writing of the *Marriage of Heaven and Hell*, remarks that there could not "well be a harder task than the endeavour to trace out any kind of system, any coherent or consistent philosophy, in this or in any other of Blake's writings"; while of the *America* he says: "It is verse hard to fathom, with far too little nature behind it or backbone, a redundance of mere invention—the fault of all this class of Blake's writings; too much wild tossing about of ideas and words." And, further, Gilchrist states that "to men of the world, his was a mind which, whether judged by his writings or his talk, inevitably seemed scarcely a sane, still less a trustworthy one" (61).

Swinburne, full of sound and fury, lays about him so vigorously that a good many of his blows fall upon him whom he is defending. "Blake had," says Swinburne, "a devil, and its name was faith." For Swinburne the "vagaries and erratic indulgence in the most lax or bombastic habits of speech become hopelessly inexplicable" after the excellence displayed by Blake in some of his poems. He comments scathingly on the "chatter" about Blake's madness, but previously he has spoken of his "fitfully audacious and fancifully delirious deliverance" and of his "eccentric and fitful intelligence." By regarding Blake rather as "a Celt than as an Englishman" he thinks it is not difficult to understand from whence he derived his "amazing capacity for such illimitable emptiness of mock-mystical babble as we find in his bad imitations of so bad a model as the Apocalypse." Again, of the prophetic books, *Europe* and *America*, he says that there is "more of the divine babble which sometimes takes the place of earthly speech or sense, more vague emotion with less of reducible and amenable quality than in almost any of these poems." He speaks of the "insane cosmogony, blatant mythology, and sonorous aberrations of thoughts and theories." "Sickness or sleep never formed such savage abstractions, such fierce vanities of vision as these; office and speech they seem to have none; but to strike or clutch at the void of air with feeble fingers, to babble with vast lax lips a dialect barren of all but noise, loud and loose as the wind." However, though Blake was "violent and eccentric at times," Swinburne seemed to be able to derive comfort from the conclusion that his "aberrations were mainly matters of speech and writing" (62). If the case for

Blake's sanity had only Swinburne as its advocate, it would indeed be in a parlous state.

Another defender of Blake against the imputation of insanity, Dr. Greville Macdonald, is evidently of the opinion that he has suffered almost as much at the hands of those who wish to exculpate him from such an accusation as from those who hold the opposite opinion. "Blake was undoubtedly mad," he said, "if we are to believe all that his apologists wrote to prove the contrary." He opposes the views of Ellis and Yeats in regard to the interpretation which they have attempted to give of the involved prophetic books: they "invite us to substitute an absolutely unintelligible mysticism for some of the grandest symbolic writing the world has ever produced." In another place he says: "I am not sure that consistency is not the finest test of sanity, just as incoherence is the final proof of aberration" (63). Without pausing to discuss the utility or the validity of such a test, it will be interesting to record the criticism by another apologist, Mr. Arthur Symons, of Blake's *The Four Zoas*. "It is," he says, "without apparent cohesion or consistency"; whilst the *America* is "the most vehement, wild, and whirling of all Blake's prophecies" (64). But Dr. Macdonald's descriptions of some of Blake's writings are sufficiently suggestive that—even in his opinion—all was not well. The *Jerusalem* is "indeed a strange medley of passionate poetry and catalogued bathos. We have pages and pages of stuff that were not worth reading, but for the shining gems hidden among the rubbish." And again he remarks: "If the apparent purposelessness of our prophet's vast weediness seems often to justify the verdict of madness, we are again and again, while striving to find passage through the jungle, driven to exclaim that Blake's so-called madness is infinitely greater than our sanity." Under the circumstances it is not surprising that Dr. Macdonald feels constrained to admit that "Blake's small power of criticising his own work implies some lack of mental balance" (65).

Mr. Symons has to confess that he also finds much of what Blake has written quite unintelligible: "Of the myth itself," he says, "it must be said that, whether from defects inherent in it or from the fragmentary state in which it comes to us, it can never mean anything wholly definite or satisfying, even to those minds best prepared to receive mystical doctrine." If a certain passage by the same writer is truly descriptive of Blake it

reveals in him a characteristic symptom of many forms of insanity when they have proceeded to the length of obviously diminished self-control: "With Blake," he says, "belief and action were simultaneous." However, in another place Mr. Symons says that "with Blake, as with all wise men, a mental decision in the abstract had no necessary influence on conduct" (66). Obviously—unless in Mr. Symons' psychological scheme "belief" is not a "mental decision in the abstract"—the passages just quoted contradict one another.

Mr. Joseph Wicksteed, who surmises that "the crude charge of insanity which used to be levelled against Blake is surely almost dead," admits that "there remains a too well-founded charge of waywardness and extravagance, such as cannot be attributed to normal processes of mind, even in the blast furnace of genius." "Blake's undoubted abnormal mentality was controlled by a not less remarkable faculty for artistic, and even philosophic, unity and coherence. In one sense he was further removed from the lunatic than those who have less cerebral peculiarity. And even if there were real lapses of control, these were rather literary than practical. His actual life seems to have been conspicuous for its sanity"; and Mr. Wicksteed, too, finds that Blake is "often abysmally unintelligible." We may apparently say that a person's mental processes are not normal, that he has some "cerebral peculiarity," and that in his conduct he exhibits "lapses of control," but we must not use the accursed word "insanity" to describe his "abnormal mentality"!

In an article which deals specifically with the question of Blake's mental state, and which he entitles "The so-called 'Madness' of William Blake," Mr. Wicksteed does not seem to improve the case for the defence. In it he informs us that with Blake "expression was a refuge from obsession"; and further he states that "Blake's peculiar position is that he takes us through the abnormal and morbid in the *subjective* world. He is almost alone in having entered the fiery caverns of the maniac and *not* been mad" (67). It is difficult to comment upon such expressions as Mr. Wicksteed uses here. He appears to be discussing a species of "psychology," which, however useful for literary purposes it may be, is much too weird and wonderful for plain and practical people who have to do what they can to understand the workings of disordered brains, and

to suggest appropriate treatment for the condition. Of course, it is almost an insult to mention the word cerebrum or brain to any devotee of these strange systems of transcendental psychology. By some "occult" or "mystic" methods the workings of the "immaterial substance" which hovers like an aureole—or like a mephitic vapour—around the skull, or around the brain, or which settles on the pineal gland of the Cartesian, can be much more easily understood than by the study of the vulgar and commonplace processes of cerebral physiology, or of nervous metabolism!

Mr. G. K. Chesterton's attitude in regard to the question of Blake's sanity or insanity is rather difficult to define, as the following extracts show. "If we ask," says Mr. Chesterton, "whether there was not some madness about him, whether his naturally just mind was not subject to some kind of disturbing influence which was not essential to itself, then we ask a very different question, and require, unless I am mistaken, a very different answer. When all Philistine mistakes are set aside, when all mystical ideas are appreciated, there is a real sense in which Blake was mad." The same writer notes that while Blake was at Felpham his "eccentricity broke out on another side. A quality that can frankly be called indecency appeared in his pictures, his opinions, and to some extent in his conduct" (68). It is a little difficult, however, to follow the flights of fancy of certain of these amateur alienists. Mr. Chesterton, for instance, goes on to say that it was "an idealistic indecency." As it was evinced in Blake's pictures, opinions, and conduct, one would have thought that it might certainly have been described as being, on the contrary, decidedly realistic. It was Hobbes who made the remark about words being wise men's counters; and the saying concludes with a statement as to the value they possess to those who are not quite so wise.

Having said that Blake was mad, Mr. Chesterton later comes to the conclusion that "in other words, Blake was not mad; for such part of him as was mad was not Blake." It was "an alien influence" that brought about the mental change in him. Then back we go again to a statement that Blake was mad. "If Blake had always written badly he might be sane. But a man who could write so well and did write so badly must be mad." . . . "I firmly believe that what did hurt Blake's brain was the reality of his spiritual communica-

tions . . . I say he was mad because his visions were true." And yet once again, in referring to Blake's reason : " It had been broken (or cracked) by something ; but what there was of it was reasonable " (69). No further comment will be made regarding these statements, except to quote another passage from Mr. Chesterton's essay, which, with merely a verbal alteration, is singularly applicable in the present instance.

The truth is," he says, "that beyond their scientific ideas they have not the absence of ideas but the presence of the most vulgar and sentimental ideas that happen to be common to their social clique " (70). If herein we read " pseudo-scientific " the description is sufficiently appropriate.

Still another commentator, Mr. Alfred T. Story, has given his " explanation " of the psychological puzzle—for such it has certainly been to most of the apologists—of Blake's mental processes. Mr. Story protests against the assertion that Blake was insane, but the phrasing of his verdict in the matter might well be accepted as evidence of mental unsoundness. " There was," he says, " a want of balance betwixt the spiritual or visionary faculty and the power of expression . . . The brain becomes heated under the fervour of vision . . . With the continued rush of blood to the brain the whirl of thought becomes terrific, the visions hustle one upon another, the demons ' howl ' ; there is a chaos of sound and fury. The frenzied prophet, however, faithful to his trust, still labours with the weak mortal instrument at his command to set down the revelation. What wonder if he be at times incoherent, incomprehensible ? The marvel would be if he were not." It is a fairly comprehensive list : howling demons, hustling visions, chaos of sound and fury, terrific whirling thoughts, incoherence, incomprehensibility—but no insanity ! " Such, in brief," continues this writer, " is all that Blake's alleged insanity amounted to." The candid critic will admit that, on Mr. Story's own showing, it appears to amount to a good deal. Yet it was not insanity, it was " lack of mental balance arising from a preponderance of the spiritual or imaginative faculty " (71).

In France, the work of Blake has aroused much interest. There, too, certain writers have felt impelled to take up the cudgels on his behalf to defend him against the imputation of mental disorder. For instance, M. P. Berger, in an extensive study of Blake's *Mysticism et Poésie*, says that " Sans doute

l'accusation de folie ne sera plus sur nos lèvres," but he is constrained to add "Nous avons conscience de la masse de son édifice qui est restée dans l'obscurité, des parties nombreuses dont tout art est absent, parce que le symbolisme l'en a chassé." M. Berger notes, too, the decadence in Blake's poetical powers ; he expresses gracefully and in poetical terms the truth that Blake's energies were sapped by a morbid mental process. This inference is not an unfair one, as M. Berger's words show : " Nous l'avons trouvé infini dans ses idéals, limité dans ses moyens par son mysticisme même, germe morbide qui lui a donné son charme indéfinissable mais qui l'a tué à la fin comme le ver rongeur tuait sa rose malade, après lui avoir donné la mélancolie gracieuse de sa courbe retombante " (72).

M. F. Benoît (73), who also protests vehemently against the suggestion of insanity, admits the curious mental vicissitudes, the visions, and the voices, and notes the sudden changes of mood from placidity, tolerance, indifference, almost from meekness : then "l'instant d'après, le même homme nous apparaît le plus entier, le plus irritable, les plus brutal des disputeurs. Le moindre objection le met en fureur ; la seule apparence du doute l'exaspère ; il contredit pour contredire, jusqu'à s'entêter dans l'absurde, jusqu'à dénaturer sa pensée par les plus folles extravagances." M. Benoît thinks, however, that Blake is an exceptional case ; a conclusion to which he would not have come if he had had only a moderately extended acquaintance with the symptoms displayed by those suffering from mental disorder. M. Benoît is perhaps a little unkind to us when he remarks : " Si étranges que soient ses singularités mentales, elles ne font exception ni dans son siècle ni dans son pays ! " Nor does he strengthen his case for Blake when he goes on to say that he was contemporary with Swedenborg, Mesmer, Cagliostro, and Cosway, for in their records we see clearly insanity or imposture. M. Benoît thinks that neurologists and alienists cannot bring the case of Blake into the category "des infirmes d'esprit de corps qui forment la clientèle ordinaire de leurs laboratoires." Wherein one may humbly opine that M. Benoît is in error. Whilst agreeing with him that those mentioned should accord Blake a careful and earnest study, the present writer is doubtful whether his essay in that direction will be found "fécond en conclusions curieuses et suggestives" !

IV.

It is apparently the opinion of many admirers of Blake that no one who, after a critical examination of his life and works, comes to the conclusion that he undoubtedly suffered from mental derangement, can possibly still have affection for him as a man, or admiration for him as an artist or as a poet. If such a belief is held, then this much is certain—that it is based upon as incomplete a knowledge of facts as a goodly number of other beliefs are. The statement that a person is insane may—and often does—militate against his credibility as a witness, but it does not detract from the æsthetic value of his poetical or artistic productions. If we knew that the sculptor of the Venus of Milo suffered from delusional insanity we should not abate a whit our admiration for that superb work of art; if, however, he had asserted that the goddess herself had sat to him as a model, we should ask to be allowed to posit our distinct doubts as to the truth of his statement. In the same way with Blake, we do not attempt to deny the excellence of much of his work, but when we are required to believe that supernatural agencies exerted their influence over him in vision and by audition, we have to remark that certain gratuitous assumptions are involved in the statement. In the first place, it is assumed that these agencies exist, and this—despite the assertions of numerous credulous spiritualists—is far from being accepted by those who have given the matter serious study; and secondly, even granting the hypothesis that he was so influenced, we are asked to believe that these supernatural agencies exerted themselves to produce a deteriorative effect upon his productions, for, as his history proves, the more he was influenced by them the more disorderly and incoherent did his work become; in much the same way as the results obtained by the spiritualistic medium are frequently seen to be chaotic designs or puerile babble. If the automatism were to take the form of that which is associated with the epileptic state and were to be accompanied by homicidal or other noxious acts, the devotees would soon flee from the presence of the very unhappy medium or they would seek to restrain, *vi et armis*, any further exhibitions of his supernatural powers.

It will, perhaps, be of interest to cite the opinions of some of those who, while realising the artistic and poetic powers of

Blake, have not been in that condition where passion and sentiment overwhelm critical ability, and who have consequently admitted the presence of mental disorder in Blake. Tatham (74), who knew Blake, tells us that he was "a subject of much mental temptation and mental suffering, and required sometimes much soothing"; he speaks of his "eccentric and elastic mind," and of his poetry he says that it was "mostly unintelligible." As to Blake's visions and voices he remarks: "He said that he was the companion of spirits who taught, rebuked, argued, and advised with all the familiarity of personal intercourse. What appears more odd still was the power he contended he had of calling up any personage of past days, to delineate their forms and features, and to converse upon the topic most incidental to the days of their own existence." Tatham's comment upon this is: "How far this is probable must be a question left either to the credulity or the faith of each person"! (75). It is not possible to leave the matter there. The credulous believer has been so often the victim of the schemer and the dupe of the charlatan that it is necessary to examine with whatever powers of exact scientific investigation we have attained to in the process of our evolution, any claims to the control of supernatural agencies, and in the same spirit must we deal with the asseverations of "brain-sick" visionaries.

Dr. Malkin who, too, knew Blake, writing in 1806, says that he possesses "merit, which ought to be more conspicuous, and which must have become so long since, but for opinions and habits of an eccentric kind"; and further, of Blake's blank verse: "The unrestrained measure, however, which should warn the poet to restrain himself, has not unfrequently betrayed him into so wild a pursuit of fancy as to leave harmony disregarded, and to pass the line prescribed by criticism to the career of imagination," while, in another place, he speaks of Blake's "singularity," of his "enthusiastic and high-flown notions on the subject of religion," and of the "hue and cry of madness" which have pursued him (76).

Charles Lamb, writing to Bernard Barton in 1824, speaks of Blake's "wild designs" to Young's *Night Thoughts*: "He paints in water-colours marvellous, strange pictures, visions of his brain, which he asserts that he has seen. They have great merit." After commending certain of Blake's poems, Lamb adds: "The man is flown, whither I know not, to Hades or a

mad-house" (77). As we have already noted, Southey described Blake to Crabb Robinson as a "decided madman."⁽²⁾ That was in 1811, after Southey had paid a visit to Blake. In *The Doctor*, written more than twenty years later, Southey speaks of him as "that painter of great, but insane genius," and again as "this insane and erratic genius" (78). Wordsworth describes certain of his poems as "undoubtedly the production of insane genius," and he was not an unappreciative critic, for he adds: "There is something in the madness of this man which interests me more than the sanity of Lord Byron and Walter Scott" (79). John Thomas Smith, Keeper of the prints and drawings in the British Museum, in a biographical sketch of Blake included in *Nollekens and his Times*, published in 1828, speaks of him as bearing a "stigma of eccentricity," and says that he was "supereminently endowed with the power of disuniting all other thoughts from his mind, whenever he wished to indulge in thinking of any particular subject, and so firmly did he believe, by this abstracting power, that the objects of his compositions were before him in his mind's eye, that he frequently believed them to be speaking to him" (80).

Dr. Richard Garnett says of Blake that "in ancient times, and perhaps in some countries at the present day, he would have been accepted as a seer; in his own age and country the question was rather whether he should be classed with visionaries or with lunatics. A visionary he certainly was, and few will believe either that his visions had any objective reality, or that he himself intended them to be received merely as symbols . . . He confused fancy with fact; unquestionably, therefore, he laboured under delusions." Dr. Garnett does not appear, however, to think that Blake's condition could be described as one of insanity; but his interpretation of the term "insane" differs from that given to it by the judicial authorities and by alienists. Few of either of these would agree with Dr. Garnett when he goes on to say that, for example, "Prince Polignac brought the monarchy of the Restoration to ruin in deference to imaginary revelations from the Virgin Mary, yet no court of law would ever have placed him under restraint" (81). Dr. Garnett, however, notes the gradual dwindling of the poetic faculty in Blake as the artistic grew: "There is less of metrical beauty, and thought

and expression grow continually more and more amorphous," in the later poems. The *Auguries of Innocence* seem "little remote from nonsense," while of the *Descriptive Catalogue* he says that it is "crammed with statements far more significant than Blake's visions of a condition of mental disorder" (82). On the whole, it would perhaps have been more fitting to place Dr. Garnett among the "philosophic doubters." However, he has been classified by some as an opponent of the view that Blake was sane, so that his testimony may be allowed to remain in the position allocated to it.

Mr. de Selincourt discusses at some length the dispute in regard to Blake's sanity. "Was Blake mad? The question is," he says, "unpopular, yet all the vociferation of Blake's admirers has not been able to silence it. Those who defend Blake's sanity with the greatest fervour are often more compromising in their statements than his direct opponents." As to Blake's assertions of his visionary powers, Mr. de Selincourt mentions the names of Isaiah and of Ezekiel and says: "Blake's visions can never come to be recognised as based upon the same order of spiritual insight as theirs"—[It is, indeed, difficult to see why such an arbitrary distinction should be made between one set of visions and another!]"—"but if they cannot, while yet to Blake himself it is a matter of triumphant conviction that they can, and if this false conviction is a ruling conviction of his life, I do not see that his admirers have any serious right to complain if the charge of madness is brought against him." The "entire mystical mechanism of the Prophetic Books, with its gigantic *dramatis personæ*, its geography that violates the laws of space, its history that neglects the passage of time, its unexampled fusion of violence and vagueness in almost every department of thought, is a mere fungus of mind." "With every allowance for the unintelligibility of the language, its unrelieved intensity is a sufficient test; the normal mind cannot assimilate more than two pages of Blake's prophecy without sensations approaching nausea." Mr. de Selincourt maintains that Blake was guilty of "self-deception so convincing that it transmits itself to many of his readers. It was a mental obsession by which his whole life . . . was coloured. It was a kind of madness" (83). It is hardly justifiable, however, to use the term self-deception in this connection, at least, if it is to be associated with any sense of guilt or wilfulness. It would be more fitting to say

that there was misinterpretation. Blake was the victim of his tyrannous organisation: his consciousness was not able to interpret correctly the vague stirrings of his subconsciousness. Just as an error of refraction gives rise to faulty vision, so disorder in certain cerebral cell-areas leads to incomplete or uncorrected action in others, for example, in hallucinations and delusions such as Blake experienced. That many of Blake's readers have taken him at his own valuation, and have consequently been deceived into believing that his hallucinations and delusions were real visions and well-founded beliefs is undoubtedly true. In practice it is convenient to draw a distinction between the hallucinations which are consistent with sanity—where the person has insight into his condition, and realises that the hallucinations are subjective, that they are "shadows, not substantial things"—and those which are associated with insanity. But this distinction does not imply any difference in causation; it is really quite arbitrary. Yet certain writers have adopted the same attitude as Mr. de Selincourt in regard to this question—notably Brierre de Boismont—but the differentiation is at bottom sentimental rather than scientific.

Mr. Sturge Moore has noted the diminution of Blake's poetical ability: "His stock of images steadily perished, losing in fineness and vividness as the subtler shades of all that in youth he had been so eagerly enchanted by wore out in his vision-laboured mind." As to Blake's *Myth* and his *Prophetic Books*, Mr. Moore says that the "psychology is confused and ugly," while "the language he employs grows more and more monotonous and exasperating, since all æsthetic control over it is abandoned, even when he does not write subconsciously at the dictation of visions endowed with only part of the faculties of their amanuensis. Tedious repetitions of every kind abound." The *Prophetic Books* are, the same writer remarks, "very poor literature," and "though a man possessed by great themes insecurely grasped may write confusedly, no man not mad, having definite and important ideas to convey, would so impenetrably have wrapped them up." To Blake's "hopeful editors" Mr. Moore puts the query: "Is it really conceivable that thoughts should be clear in a mind that could choose to express them in words so far wrested from their common use, or in such a code of symbols as Blake's?" (84).

Ireland comments on the similarity between Blake and
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Swedenborg. "Both," he says, "had a sublime opinion of their own merits. Both were deeply religious ; both were mystics who sought for new light in the inner sense of the Scripture, and believed that they conversed with the spirits of the departed." He points out that the necessity of working for his daily bread no doubt prevented Blake from giving himself up entirely to the ideal as Swedenborg did ; and he adds : "As it was, his conduct was eccentric and imprudent, sometimes extravagant to the very verge of insanity, if not beyond it " (85).

Maudsley, discussing hallucinations and illusions, states that "mental representations so intense as to become mental presentation is a faculty of mind apt especially to be met with among certain artists." In this connection he mentions Blake. "It was very remarkable," he says, "in that strange and eccentric genius, William Blake ; he used habitually to see his conceptions as actual images or visions " (86).

It is difficult to realise how any unprejudiced person who considers the evidence in Blake's case can arrive at any other conclusion than that he exhibited mental disorder. There is no gainsaying the statements made by one writer who summed up the evidence and gave his verdict in the following terms : "On an analysis of an estimate arrived at by these critics it will be discovered that, while one defines him as an eccentric, another as a visionary, a third as an enthusiast, a fourth as a superstitious ghost-seer, all feel it expedient to mollify or to apologise for modes of action inconsistent with the habits of other healthy men ; it may be safely affirmed that if he was not insane in conduct, Blake betrayed undoubted symptoms of his mental malady in painting " (87). Even Blake's conduct, however, was influenced by the imaginary voices and the morbid delusions from which he suffered ; indeed, it is unduly to limit the definition of the term conduct if we exclude from it such acts as those of writing and of painting.

Though the prevailing state with Blake was one of exaltation and belief in his own capabilities, there were also periods of extreme depression, and the condition may, with little doubt, be classified as one of maniacal-depressive insanity. The fluctuations in his mental condition were so marked as to be in themselves sufficient evidence of marked nervous instability, and these alternations were so pronounced as to be inconsistent

with the normal periodicity which is to be noticed in those whose sanity is not impugned. When, too, we find that in addition to these alternations there is evidence of diminished control—as shown in undue excitability and impulsive violence, of hallucinations of sight and hearing, and of delusions of persecution—there is no doubt that the boundary which separates sanity from insanity has been crossed. Those who protest against this plain statement do not seem to realise that they do Blake less than justice. They would hold him responsible for all his vagaries rather than allow a verdict of *non compos*. Chiefly this is so in order that the vague, mystical element in his work may be imputed to some vague supra- or extra-natural power instead of to the disorderly functioning of unstable nerve-tissue, or to misunderstood organic reflexes. These nervous disorders are obscure enough even when they are considered apart from the veiling mystery in which so many love to hide them; it is not, therefore, necessary to invoke occult powers, and by so doing to render the subject nebulous and impenetrable. Still less is it wise to place behind the disease of insanity a Mumbo-Jumbo, which has to be invoked, or a Raw-head and Bloody-bones, which has to be exorcised.

"Great is truth, and mighty above all things," and we may add the words of Francis Bacon wherein he says that "it shall prevail." That Blake was endowed with great abilities it has herein been frankly admitted, but that such an admission entails a blind and uncritical adherence to the view that everywhere and at all times he exhibited the attributes of genius in his works is as frankly denied. With the opinion of one who, while admitting Blake's "gift of imaginative intensity," yet realised that he "fell short of completeness," we may fittingly conclude: "There is small profit in that overpraise, even of the dead, to which a proverb that has sheltered many a knave invites us. Blake, at any rate, is great enough to bear *nil nisi verum* for his epitaph" (88).

(1) Blake thus elegantly expressed his sentiments:

"The only man I ever knew
Who did not almost make me spue
Was Fuseli."

(2) *Vide supra*, p. 224.

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The Luetin Test in Parasyphilis. By D. MAXWELL ROSS, M.B., Ch.B.Edin., Assistant Physician, Royal Asylum, Edinburgh.

DURING the spring of this year, my friend Lieutenant Crocket, R.A.M.C., obtained, through the kindness of Dr. Noguchi, a small supply of luetin, and with this he carried out a series of tests, to which he was anxious to add some observations on its use in mental cases. By permission of Dr. G. M. Robertson he was able to examine a series of cases in Morningside Asylum, and I was fortunate in being asked to co-operate with him. Owing to our small supply of luetin, the number of tests done was necessarily limited, and we intended carrying our observations further when Crocket was called away to duty. Only a short time ago the sad news of his death in action was received, and it is largely on this account that I venture to place on record so small a number of observations.

In 1911, Noguchi reported, in the *Journal of Experimental Medicine*, that he had succeeded in growing the *Treponema pallida in vitro*, and, a few months later, he published his first article on the luetin test in the same journal. This test for syphilis is analogous to the intra-dermal tuberculin test of Mantoux and Moussu, and the technique is the same. Luetin consists of a sterile emulsion made from cultures of the

Treponema pallida, and to obtain it the organism is grown on ascitic fluid agar for from six to fifty days under anaërobic conditions. The growths are then ground down in a mortar, and an emulsion is made by adding cultures of treponema in ascitic fluid. This emulsion, when sterilised, is ready for use. A dose of 0.07 c.c. is diluted with an equal amount of normal saline, and injected intra-dermally with a fine needle, and the local reaction observed.

When the reaction is negative, a small wheal appears in a few hours, and in twenty-four there is some induration, and a faint hyperæmic blush at the site of injection. This hyperæmia fades rapidly in a day or two, but the induration, which is usually about 3 mm. in diameter, may still be felt four or five days later as a minute nodule in the skin.

Three types of positive reaction have been described. First, an indurated papule surrounded by more or less erythema, and usually quite tender, appears in twenty-four hours, and tends to increase to the third or fourth day, when it may regress ; or it may pass into the second or pustular type of reaction, in which a small pustule forms at the site of injection, and after a few days becomes absorbed, leaving an indurated area which may persist for a considerable time. The pustule is usually small and remains dry, requiring no particular attention. None of our cases in which pustulation took place required any local dressing whatever. In some cases, however, much more marked local reactions have been reported. Wolfsohn, in his first series of cases, records two who complained of painful and tender arms, and one of these had enlargement of the axillary glands. He also mentions several cases in which hæmorrhagic pustules appeared, which were opened and exuded semi-fluid, grumous material. Benedek also records three cases in which on the fifth day the areola measured 3 to 5 cm. in diameter, and in which the pustules discharged a thick, brownish-yellow fluid on the eighth to the tenth days, after which involution began. A papule could be distinctly felt three weeks later, and the skin was discoloured.

The third type of reaction has been termed the torpid form. In it the reaction is delayed for anything from four to twenty-eight days after injection, and, when it does appear, usually takes the pustular form. This torpid form is most commonly seen in parasyphilitic and congenital cases, and was present in

two of our cases, one a general paralytic in a state of remission which had lasted two years, and the other a boy of nine suffering from congenital general paralysis. Wolfsohn, out of 12 cases with cardio-vascular lesions, obtained a torpid reaction in six.

Constitutional disturbances are not common. None of our cases manifested any. Cohen reports 179 cases tested with no bad effects, while Boardman and Gorham record 52 with no constitutional disturbances, and Kilgore saw none in 120. When present the symptoms consist of malaise, tachycardia, abdominal pains, bone pains, slight nausea, and occasionally a little fever. These usually last only twenty-four to forty-eight hours. Wolfsohn records one case, a tabetic, who after injection had a fever of 103° , with severe abdominal pains and vomiting resembling crises.

Some doubts have been thrown on the value of the test in view of the fact that a similar reaction has been obtained with other substances than luetin. For example, if the luetin emulsion be injected into one arm, and a control emulsion made from the uninoculated culture media into the other, a reaction of almost equal intensity may appear in both arms. This is due to a special sensitiveness to trauma of the skin of syphilitic persons in the later stages of the disease, and has been termed by Neisser "Umstimmung." It is in itself characteristic of syphilis, but is a very inconstant phenomenon, and has little bearing on the luetin reaction.

Most observers are agreed that the test is of little value in primary and secondary untreated syphilis. If the test be looked on as an anaphylactic phenomenon, indicative of a state of hypersensitiveness to the specific proteins of the spirochætes, which state is induced by a period of cessation of the introduction of these specific proteins, then its failure in the primary and untreated secondary phases of the disease is easily understood. The disease is then so active that the patient cannot acquire the anaphylactic state necessary for the reaction. This also explains the fact that cases which, previous to treatment, gave a negative reaction, after treatment may give a positive one, and in this way the test may be used as a gauge for the efficacy of treatment. In tertiary, congenital, latent, and parasyphilitic cases the hypersensitiveness to the proteins of the spirochæte necessary to give a positive luetin reaction is to

be expected, and it is in these cases that the test should prove of value, and this expectation has been confirmed by the clinical findings.

We were able to carry out the test in sixteen cases and to contrast it in each case with the Wassermann reaction. Out of these cases, twelve were general paralytics, and two cases of cerebro-spinal syphilis. Of the remaining two cases, one was a man who stated that he had contracted syphilis thirty-six years previously, and had received little or no treatment. In his case, both the luetin and Wassermann tests were quite negative, and, on further questioning him in the light of these results, we considered it most probable that his venereal infection was not syphilitic. The remaining case was one of some interest; the patient had suffered for some years from maniacal excitement, and the character of his mental symptoms, the absence of knee-jerks, and the presence of unequal and sluggish pupils, along with the development of early optic atrophy, had suggested the possibility of general paralysis and syphilitic infection. The Wassermann test first proved negative in the blood serum, but on applying the luetin test a markedly positive reaction was obtained. This led us to apply the Wassermann test to the serum and cerebro-spinal fluid once again, and, on this occasion, we found the reaction still negative in the serum, but faintly positive in the spinal fluid, five doses of complement being deviated. In this case, the luetin proved of very considerable assistance in confirming the diagnosis.

Cases of General Paralysis.

Of the series of cases of general paralysis, 9, or 75 *per cent.*, gave a positive luetin reaction. On making a table of these results, and comparing them with those of the Wassermann reaction, one finds that the positive cases may be divided into two groups—those giving the papular or slight type of reaction, and those giving the pustular or marked type. In the first group there are four cases, and in the second five. If the degree of the luetin reaction be compared with strength of the Wassermann reaction, that is, with the number of doses of complement deviated, an interesting co-ordination is brought out. In the cases giving a "slight" luetin reaction, the extent of deviation of complement was also slight, ten doses or under,

while in the cases giving a marked reaction the extent of deviation of complement was also marked, ten doses or over.

Positive Cases of General Paralysis.

Case.	Luetin.	Wassermann.*	
		Blood Serum.	C.S.F.
1	slight	0	7
2	"	10	10
3	" (torpid)	6	1
4	"	5	10
5	marked	12	12
6	"	12	12
7	" (torpid)	15	15
8	"	10	10
9	"	15	15

I am not aware that there is any series of cases in which any connection between the degree of the two tests has been noted, and it is, of course, not permissible to draw any conclusion from such a short series of cases as this. As the positive Wassermann is indicative of the presence of metabolic substances produced by present or recent activity of the spirochæte, while the luetin is indicative of a state of hypersensitiveness to the specific proteins, there is no very apparent reason why there should be any correlation between the degrees of the two reactions. A more extended series of observations on this point would be of considerable interest.

Negative Cases of General Paralysis.

Case.	Luetin.	Wassermann.	
		Serum.	C.S.F.
1	Negative	30	30
2	"	15	10
3	"	7	3

In the first two negative cases, it will be seen that the Wassermann reaction was strong, and in both the disease was progressing steadily, and the physical symptoms particularly were marked. In the third case, the patient had been in a state

* The figures in this column indicate the number of doses of complement deviated.

of acute excitement for a year, but had very few physical signs of the disease. The Wassermann reaction in his case was slight, and he was exactly the type of case in which a positive luetin might have been expected, and would have been of diagnostic help. The further progress of this case, however, has been such as to render the diagnosis of general paralysis very doubtful, and a Wassermann reaction recently performed proved entirely negative. The percentage of positive reactions in this series of cases coincides fairly well with that of Benedek, who in a much larger series (81 cases) of general paralytics obtained a positive luetin in 80.4 *per cent.*

Cases of Cerebro-spinal Syphilis.

The test was applied to two cases of cerebro-spinal syphilis, and was positive in both. In both, the reaction was a well-marked one, and this is of some interest, as Benedek noted, in the three cases which he tested, a reaction which was so well marked in comparison to those which he obtained in his cases of general paralysis as to lead him to suggest that the type of reaction might be of aid in distinguishing the two conditions:

Case.		Luetin.		Wassermann.	
				Serum.	C.S.F.
1	.	Marked	.	2	1
2	.	"	.	Partial	Partial.

Both these cases gave very slight deviation of complement with alcoholic extract, but with lecethin and cholesterin were definitely positive. Both had been under treatment by potassium iodide and mercury with very beneficial results, as the number of cells in the cerebro-spinal fluid had fallen in a period of sixteen months from, in the first case 555 to 4 per c.mm., and the second from 520 to 7.3 per c.mm.

If the case with optic atrophy, which has already been described, be included in the series, we found that out of fifteen cases of parasymphilis, twelve gave a positive luetin reaction, that is, 80 *per cent.* This figure agrees well with the average results of other observers. If the series of parasymphilitic cases recorded by Kilgore, Wolfsohn, Benedek, and Boardman be added together, it is found that, out of a total of 121 cases, 95, or 78.5 *per cent.*, gave a positive luetin reaction.

The results obtained with the Wassermann reaction especially in general paralysis are more constant. Dr. Robertson, in his *Morrison Lectures* for 1913, states that the reaction in general paralysis is positive in 99 *per cent* of cases in the blood serum, and in 94 *per cent*. in the cerebro-spinal fluid.

In conclusion, the luetin reaction is a valuable addition to our diagnostic tests for syphilis. It is easily carried out by the clinician, is absolutely specific for the disease, and is occasionally positive in cases in which the Wassermann is negative. In comparing the value of the two tests, Much states that when it is a question of ascertaining if the patient has ever been infected with syphilis, the luetin is the more instructive, but when it is desired to know if the disease is still active, the Wassermann is the more helpful. These facts warrant its receiving much more attention than has hitherto been the case in this country.

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Remarks on the Intracranial Injection of Salvarsanised Serum. By G. H. MONRAD-KROHN, M.B., M.R.C.P.Lond., M.R.C.S.Eng., Assistant Medical Officer, London County Asylum, Bexley, Kent.

IN the *Lancet*, July 4th, 1914, I have briefly described the method of what I called "subdural injection."

In a very interesting article in the *Journal of Mental Science*, October, 1914, by Mapother and Beaton, dealing with the intrathecal treatment of general paralysis, the authors criticise the different methods of intracranial injection. As regards the subdural injection, they state that it appears "to have no

rational basis whatever, for there is no anatomical communication between subdural and subarachnoid spaces, nor is there any evidence that absorption occurs from the former to the latter."

I do not feel absolutely convinced that there is no communication between the subdural and subarachnoid spaces, and, in my opinion, there is reason to believe that absorption may occur from the subdural to the subarachnoid space. Golla's experiments—as related to me at least—show that an absorption of colloidal carbon can take place from the subdural to the subarachnoid space; and if colloidal carbon can pass the arachnoid membrane, there seems to be reason to believe that salvarsanised serum can also do so. However, it must clearly be pointed out that our knowledge about the permeability of the different membranes of the brain, and also of the circulation of the cerebro-spinal fluid, is still insufficient to allow any definite conclusion as to the utility or otherwise of subdural injections.

Practically there is, however, hardly any reason to distinguish between subdural and subarachnoid injection. The subdural space is only a potential space, and once the needle has penetrated the dura mater it has not far to go before it penetrates the arachnoid. In my first injections I made a point of perforating the arachnoid by pushing the needle a little farther in, and then withdrawing it again before injecting, and in my first short publication ⁽¹⁾ I also called the injection a "subarachnoid" injection. As a matter of fact, it is partly a subdural and partly a subarachnoid injection.

I shall briefly describe what one finds by opening the cranium immediately after an injection, *post mortem*, of stained fluid. Although an injection, *post mortem*, cannot give us any idea of absorption or permeability of the membrane, it will decide the question of the immediate fate of the injected fluid. I used weak eosin and methylene blue solutions (20–30 c.c.) and injected it after the method described in the *Lancet*, July 4th, 1914. The skull was opened immediately, and the injected fluid was found partly in the subdural space, and partly in the subarachnoid. That the stain actually reached the subarachnoid spaces was proved by the following facts: (1) It could not be washed off, (2) the arachnoid membrane was bulging over the subarachnoid spaces, (3) the staining fluid could be moved under the arachnoid by stroking with the finger; thus, it could not have been staining only of the arachnoid.

As to the distribution of the injected fluid which entered the subarachnoid space, it was not only confined to the frontal area—the site of the injection—but had also spread to the wider parts of the brain, particularly to the base, and also along the Sylvian fissure on the other side, and from there along the perivascular spaces over the convexity of the hemisphere opposite to the side injected.

It seems, therefore, that, by injecting fluid in the way I have described, a considerable part of it *immediately* reaches the subarachnoid space, and consequently not wholly by absorption through the arachnoid.⁽²⁾

Whether the subarachnoid space is a closed one, as Turnbull and Fildes believe it to be, or not has yet to be decided by further investigation, also as regards the permeability of the pia. Nearly every point in the physiology of the cerebro-spinal fluid will need to be closely studied in order to give a more definite basis for intracranial injections. In the present state of knowledge, however, the only clinical way in which we can approach the question of the utility of the various methods of intracranial injection is by comparing large groups of cases, (*a*) which have not received any treatment at all, (*b*) which have been treated with intravenous salvarsan injection only, and (*c*) which in addition have had administered intracranial injection. Because of the irregular course which individual cases of dementia paralytica take, it is most important that groups comprising large numbers of cases should be compared, preferably at the same stage (as far as can be judged clinically), and under the same conditions.

It does not seem superfluous to point out that the subjective feeling of patients is of no importance in judging the results, as feeling of elation is often a symptom of dementia paralytica.

Only a minute mental and physical examination is of value in deciding whether any improvement or not has taken place.

Furthermore, too great expectations of the salvarsanised serum treatment must be avoided. Even if the spirochætes in the brain are killed, additional neurons cannot be created in the place of those already destroyed. What we may expect of this treatment is mainly an arrest of the further development of the disease, an expectation which will require some years' experience to justify. The result of a few cases observed only for some months (the judgment, in addition, often being in-

fluenced by the patients' repeated statements of perfect well-being) is of less than no value, and can only give rise to false expectations.

After the above had been written I made some injections, *post mortem*, of 40 c.c. of water by the same intracranial method, after which I noticed the subarachnoid spaces all over both hemispheres bulging and filled with a clear fluid.

I have also tried the following method :

(1) Intracranial injection in the usual way of 5 c.c. of 20 *per cent.* sodium nitroprusside solution, mixed with 5 c.c. 2 *per cent.* phenylhydrazin solution and 20 c.c. ox serum. (This fluid physically resembles the salvarsanised serum very much.)

(2) Immediate opening of the skull ; and

(3) Washing the brain in water for a few seconds, and then placing it in a 4 *per cent.* solution of formaldehyde, which is made slightly alkaline by means of KOH.

By this method a blue colour obtains where the formaldehyde and injected fluid meet.

All these injections of various fluids intracranially show the same result—that by the method I have described the injection is subarachnoid as well as subdural—and that the part of the brain which the injected fluid first reaches is the left frontal lobe, which is decidedly an advantage.

I am of the opinion that the method of intracranial injection I described in the *Lancet*, July 4th, 1914, is one which combines the greatest simplicity with the greatest prospect of efficacy. The method is as follows : The skull, about 10–12 cm. above the anterior end of the left zygomatic arch, is trephined with a $\frac{1}{2}$ in. trephine. The dura is punctured obliquely in a forward direction with a fine needle, which is pushed in about 2–3 cm. and then withdrawn, so that about 1–1 $\frac{1}{2}$ cm. of the needle is inside the dura. The salvarsanised serum is injected quite slowly. Any irregularity, and especially slowing down, of the pulse rate is an indication to stop the injection. (As a rule, 25–30 c.c. can be injected without any inconvenience).

It can all be done under local anæsthesia, 6 c.c. of 1 *per cent.* novocain solution being sufficient, as only a very small flap is needed for the trephining. The cutaneous incision may be made behind the border of the hair ; but care must be taken not to trephine too far to the back, as hæmorrhage from one of the branches of the middle meningeal artery may then be a

rather tiresome complication. The trephine opening itself should not be behind the frontal plane through the anterior end of the zygomatic arch. A safe distance must be kept from the superior longitudinal sinus in the middle line. The skull itself is insensitive. I have found it an advantage to give $\frac{1}{4}$ gr. morphia hypodermically about half an hour before the operation. The wound is sutured whilst the patient is sitting up; the trephine aperture in the skull is left open for subsequent injections. These are performed by puncturing through the skin, pushing the needle in slowly till the cerebrospinal fluid trickles out (the patient lying with his head low); then the patient is raised to the sitting position, and the injection is carried out.

I have to thank Dr. T. E. K. Stansfield for permission to use the *post-mortem* material, and Dr. E. Faulks for valuable advice during my work.

(¹) *Norsk Magazin for Lægevidenskaben*, Christiania, 1914, No. 5.—(²) I may add that for injections *post mortem* I have preferably selected cases of dementia paralytica, in order to obviate the objection that the adhesions in this disease might possibly prevent the access of the fluid to the different parts of the subarachnoid space.

Clinical Notes and Cases.

Notes on Juvenile General Paralysis, with the Clinical Description of a Case. By C. H. G. GOSTWYCK, M.B.Edin., F.R.C.P.E., Senior Assistant Physician, Stirling District Asylum, Larbert.

JUVENILE general paralysis is of interest as illustrating one of the many ways in which syphilis may produce its detrimental effect on the human race. The disease may commence at a very early age; according to Thomson, progressive symptoms may be evident in children as young as three years. Males and females are victims in practically equal proportions. The symptoms are very similar to those of the adult form, progressive dementia being very marked; such variations as are present are due to the more undeveloped mental state of youth, and on the whole it corresponds to the demented or confused type of the adult. Periods of acute excitement, or of mental

depression, are met with, and epileptiform seizures, which may be present at any stage, are often observed. Delusions of persecution are not uncommon, and grandiose delusions occur; hallucinations are also evident occasionally at some time during the course. In the younger patients a type of advancing spastic diplegia is most common, and even in older cases spastic symptoms are more prominent than in the adult form. The pathological appearances in the nervous system have the same characteristics as those seen in cases of mature age. The duration is usually from two to four years, although sometimes it may be more protracted.

Juvenile general paralytics fall somewhat naturally into two classes, namely, those who have been mentally deficient from birth, and those who, during the years previous to the onset of the disease, are stated to have been bright and intelligent, developing the characteristic symptoms later. A large proportion show traces of congenital syphilis, or have a history of parental syphilis, and in those cases where external evidence of syphilis is wanting the absence may be explained by the spirochæte being in a resting or latent stage, taking on activity later in life, and attacking the body in its most vulnerable spot, namely, the neurones, or that the resistance of the nervous system is being slowly undermined by toxins produced by the spirochæte.

The following is a description of the only case I have seen during twelve years' asylum experience:

A. B—, æt. 17, the child of a small farmer, was the eldest of six, the other children being from all accounts normal. No history of miscarriages or stillborn children was acknowledged, nor of any hereditary tendencies to insanity. He had always been considered somewhat "simple," and was a rather backward child, learning slowly, being unable to profit by his attendance at school in an average degree. At fourteen years of age he began to work on a farm, doing odd jobs for eighteen months; at the end of which time he complained of pains in both feet, and as these were attributed to flat-foot he was made to do tip-toe exercises, which seemed to relieve the condition. But shortly after this his parents noticed that his mental condition was altering, that he was becoming dull and stupid, talking less than formerly. Two months before admission to the asylum he lost a letter entrusted to him for the post, and received a severe scolding. This was the starting-point of a more decided change of character, for he then became stubborn, would not do as he was told, and would not answer; he cried like a frightened child when spoken to, and appeared unaccountably nervous. His habits rapidly altered, he lost all sense of decency, he

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became dirty and required attention as would an infant. During this later period his parents observed that his legs were becoming stiff, and he walked very badly. Eventually he was confined to bed owing to muscular weakness. There was no history of fits or convulsions.

When admitted to Stirling District Asylum on October 7th, 1913, his general condition was very poor. He was quite unable to walk, and could not stand without assistance. His legs were spastic, and movements of hands and fingers inco-ordinate. His speech was indistinct and inarticulate, the sounds he uttered were unintelligible, the only word which could even be guessed at being "mother." Sphincter control was quite lost, fæces and urine being voided involuntarily. Sensation, as tested with a pin-prick, was markedly diminished all over. The knee-jerks were much exaggerated, and the plantar reflexes normal. His pupils were equal, much dilated, but reacted sluggishly to light. He gave no sign that sounds were audible, and did not seem to understand what he saw. His teeth were typically of Hutchinson type, notched and peg-shaped, and there were old syphilitic scars around the angles of his mouth. His heart's action was irregular, but there was no alteration in the character of the sounds. Pulse, 120. Temperature, 100.2° F. His mental condition was one of dementia, with some temporary agitation at first which passed off within an hour or two after admission. He was quite unable to understand what was said to him, or to give any indication as to his condition, nor could he look after himself in any way. He required to be fed and tended after the fashion of a general paralytic patient in the third stage. One month after admission his sphincter control had improved, but he was as helpless as ever. His expression was one of quiet imbecile pleasure. He smiled when spoken to, and to everything responded with a word that sounded like "fine." Occasionally he was mildly restless, turning about in bed, but never attempting to get up. Lumbar puncture gave a result positive for general paralysis; the pressure was increased, the fluid clear and alkaline, markedly turbid on boiling, and the Nissl-Nonne test was positive and well marked; the cells were greatly increased, averaging twenty per field, lymphocytes plentiful with plasma cells, some Gitter cells, and a few polymorphonuclear leucocytes. During the following months his condition grew slowly worse, until, at the beginning of the fifth month of his residence, he was very thin and emaciated; he made no sound, his only movement was to turn his head from side to side, and his legs and arms had become very contracted. He died six months after admission, a pulmonary congestion setting in two days prior to his death. There were no convulsions or seizures during the course of his illness.

The *post-mortem* appearance of the brain was typical of general paralysis—the dura was thickened, no pachymeningitis hæmorrhagica was present. The arachnoid was thickened and opalescent, especially along the line of the vessels, and adherent to the tips of the convolutions, causing small erosions when stripped off. The convolutions were wasted, and separated from each other, especially on the anterior half of the cerebrum. The lateral ventricles were much enlarged, and thickly covered with granulations, as was the floor of the fourth ventricle. There was excess of cerebro-spinal fluid, and the blood-vessels at the

base of the brain were thickened. The brain weighed 43 oz. The microscopic appearances confirmed the diagnosis, as the characteristic group of lesions were very definite. The vessels showed marked periarteritis with plasma-cells, there was much proliferation of neuroglia, and the nerve-cells were degenerated. The central canal of the spinal cord was entirely closed throughout its whole length by proliferated endothelial cells.

Whilst this lad was a patient, his mother, æt. 40, was admitted suffering from acute melancholia, and died after the attack had lasted three months. Unfortunately, no *post-mortem* was permitted, but her symptoms did not suggest general paralysis.

In this case, a congenital syphilitic, mentally deficient boy, the onset appeared at the age of fifteen in a slow but definite progressive mental deterioration, followed by a more rapid mental change after a scolding, which may have provided an accessory factor of mental stress. The neuronc degeneration seems to have been somewhat swift, as it was well marked within two months after its commencement. The emotional state changed quickly, for he passed through a phase which had a melancholic colouring within the same period; and appearing later was a condition of euphoria, as judged by his expression of happiness, and the inane smile he assumed when addressed. He exhibited no delusions or hallucinations at any time, and no seizures or "faint turns" were noticed prior to admission, and certainly none after. The duration of the disease from onset to death was only eight months.

It was thirty-seven years ago, when general paralysis of the insane was believed to be a disease confined to adult life, that Sir Thomas Clouston recorded the first case of juvenile general paralysis in a boy, æt. 16, and since then many other cases have been recognised, until it is no longer considered to be so very uncommon. Fennell looks on the disease as one which is by no means the rarest form of breakdown in children, and places the number among imbecile children at 5 *per cent.*; and Dr. Clarkson tells me that there are nearly always one or two among his patients at the Institution for Imbecile Children at Larbert.

The cause of general paralysis in the adult is now recognised to be syphilis, and has been proved by the researches of Noguchi and others, by the finding of the *Spirochæta pallida* in the brains of those dying from the disease, and we have the same factor acting as a congenital infection, and causing the same

paretic symptoms in young persons. Syphilis is also a factor in the causation of imbecility, but there is a considerable discrepancy between the percentages obtained by various observers. Tredgold quotes the results of eight observers in different countries, of which three find positive Wassermann reactions which vary from 1.5 *per cent.* to 4.8 *per cent.*, and five give positive reactions varying from 15 *per cent.* to 30 *per cent.* Chislett obtained a positive reaction in eight of fourteen cases of imbecility.

Fraser and Watson placed the percentage at the high figure of over 50 *per cent.* of the mentally defective children they examined, and only a very small percentage of their cases giving a positive Wassermann reaction showed external evidence of congenital syphilis.

It is impossible in early life to say whether any given imbecile child will prove later to be a general paralytic, and only after the progressive symptoms have shown themselves can the case be declared as one of dementia paralytica. A systematic performance of lumbar puncture of young imbeciles, especially when combined with the Wassermann test, might prove to be of interest and productive of valuable results from the point of prognosis, at the same time throwing some more light on the incidence of progressive paralysis among such patients. By no means every child which is the subject of congenital syphilis develops into a general paralytic, and this seems to lend some colour to the idea that there may be some special form of spirochæte which causes the symptoms of general paralysis, especially when we consider those cases in which husband and wife have both suffered from the disease, the one having infected the other, and where one person has infected several others, who, later on, develop general paralysis, and also the more unusual cases where both parents and child have all been general paralytics. Although this form of spirochæte has not yet been isolated, there are some grounds, in the slowly accumulating evidence, for belief in its existence, and possibly the present view that in general paralysis the central nervous system is especially vulnerable to the toxic effects of the *Spirochæte pallida*, or that this organism is assisted by the *Bacillus paralyticans*, will require to be modified.

Bolton has put forward an interesting theory with supporting evidence with regard to general paralysis. He holds

that subjects of this form of mental disease would, had they not been syphilised, have suffered from one or other types of primarily neuronc dementia, and he is of the opinion that an attack of syphilis is a necessary antecedent to dementia paralytica, supporting his argument by the appearances presented by the brains of general paralytics and those of progressive senile dementia, which do not differ in their essential pathological features. With regard to juvenile general paralytics he expresses the opinion that had these children not been syphilitic they would have become ordinary examples of stationary premature dementia. But, in consequence of this infection, parietic symptoms show themselves at a time when the neuronc activity is becoming most evident, and this activity replaces the ordinary stress and strain of adults, with the result that degeneration of the neuronc elements follows as a natural sequence. This last view has something to recommend it when we consider that there can be no stress of life affecting those imbeciles who develop general paralysis; and in those young persons who are not, or are only mildly, mentally defective the stresses of life can only affect them to a slight degree, for their age is often somewhat young to expect them to react to these in a manner which can compare with the more developed brain of an adult, and the other usual factors, such as alcohol and sexual excess, can be excluded.

The treatment of juvenile general paralysis must be on the general lines as for the adult form, and, although the benefit of salvarsan is still undecided yet, there are sufficient instances of amelioration on record to justify its use even in those who have been imbecile from birth; and more especially in those cases which are seen during the earlier stages. The treatment devised by Dr. G. M. Robertson of intra-venous injection of salvarsan, together with intra-spinal injection of antisyphilitic serum, combined with the administration of urotropine and calomel, gave definite evidence of a promise of satisfactory results, three out of twelve cases so treated recovering sufficiently to be discharged from institution care. And he was inclined to believe that the negative results were due to a want of vigour in pushing remedies in a combination and system which was at the time tentative.

In support of the fact that salvarsan undoubtedly does good in actual imbecility arising from syphilis, Finlay has published

some very striking results, and leaves the impression that the same remedy might be administered in most cases of imbecility with advantage. And perhaps a similar amelioration might be expected in those cases of imbecility which, on showing some progressive mental and physical symptoms, might well prove themselves to be cases of juvenile general paralysis.

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The Clinical Simulation of General Paralysis of the Insane. By J. R. PERDRAU, M.B., B.S.Lond., Assistant Medical Officer and Pathologist, Dorset County Asylum.

IT happens not unfrequently that a provisional diagnosis of general paralysis is made in the insane, which the subsequent course of the case fails to confirm. In the three cases on which this paper is based a diagnosis of general paralysis was made, in one of them quite confidently, and in the two others only as a last resort, because the course of the disease presented so many unusual clinical features. These three cases are specially interesting because a *post-mortem* examination was made on each of them, and so permitted of a confirmation or otherwise of the diagnosis, and also on account of the very interesting pathological findings.

A. B.—, female, æt. 62, admitted November, 1911, died May, 1912; duration on admission said to be one week only. On admission she was very dull and confused, had a weak, unsteady gait, and general tremors; knee-jerks were dull but equal; pupils equal, and reacted both to light and accommodation; pulse 76. When I saw her on February 15th, 1912, she was weak, very unsteady on her legs, tremors of tongue

were very marked, speech very slow, deliberate, and slurred, knee-jerks dull but equal, pupils equal and reacted both to light and accommodation, pulse 64. She was unable to attend to her bodily wants. Mental condition too dull for intelligible answers to be given.

A fortnight later she had what was described to me as a typical congestive seizure, and on the following day the head and eyes were still turned towards the left. I then considered the possibility of a cerebral hæmorrhage, but the signs cleared up too quickly. I attached no importance to the short history given on admission, and looked upon her as probably a case of general paralysis. I did not see her again after the month of March, and she died in May, becoming gradually more feeble, and being finally unconscious for twenty-fours before death.

I was not present at the *post mortem*, where a tumour of the size of a Tangerine was found pressing on the left frontal region, and hanging by a small stalk from the pia in the neighbourhood of the optic chiasma. When I look back upon the case it is clear that certain features, to which I did not then attach sufficient importance, do not seem to agree with a diagnosis of general paralysis; for instance, she was always dull and drowsy, with a pulse of about 60, the deep reflexes were only a little blunted all round, but quite normal otherwise; and also her sex and age were against general paralysis of the insane. On the other hand, it must be remembered that there were no localising signs, such as paralysis and alteration of the deep reflexes, and there was no vomiting. Her very unsteady gait was probably due to vertigo, of which she could not complain. She had never complained of headache in the first part of her illness, and, as cerebral compression was not suspected, the fundus of the eyes was not examined, and such an examination is never an easy performance in a lunatic.

The tumour itself was very interesting. It was the size of a Tangerine and was made up of a collection of cysts as big as marbles, with translucent walls and each containing a clear, thick, colourless fluid like the white of an egg. In the walls of the loculi was a variable amount of denser tissue containing small masses of a cream-coloured, opaque substance, which looked like caseous material to the naked eye. Microscopically, the walls of the cysts are made up of layers of polygonal cells, which are from two to twenty deep. These cells resemble those of the Malpighian layer of the skin, and as they approach the lumen of the cyst tend to assume a more and more cylindrical character until the lining cells of the lumen are definitely columnar in

type, but lack a basement membrane. In a few rare places these cells are elongated, and form definite whorls arranged round some similar cells in their centre. The cysts themselves contain some colloid material, which has solidified in places, and there is undergoing organisation. The gritty, caseous-looking particles are whorls of large granular cells, whose nuclei are mostly represented by an empty space, and which stain a bright yellow with Van Gieson's stain. These whorls are of all sizes, and in only one instance was a blood-vessel seen running through its centre. Although the two kinds of tissue exist side by side, no obvious transition can be seen of the cells of one kind of whorl passing into those of the other.

B. C—, female, æt. 49, admitted 1908, died 1912. History was defective, but she had been looked upon as eccentric for the last twenty years. On admission she was confused and emotional, had an impaired memory, and an exaggerated sense of well-being. She showed most of the physical signs of general paralysis—*e. g.* knee-jerks exaggerated and unequal; pupils also unequal, and reacting very poorly to light; tongue tremulous, speech slurred, etc. In addition to restlessness, she showed a tendency towards choreiform movements, especially as regards the head and arms. Her subsequent history is one of gradual mental and physical deterioration, and she was soon quite demented.

We always looked upon her as a case of general paralysis, and it was not until towards the end of her illness that the slight choreiform movements, which still persisted in the head and arms, impressed me as being of diagnostic significance on account of their stereotyped character, and the probability was only then recognised of her being rather a case of chronic chorea, if not actually of Huntington's chorea.

At the *post mortem* nothing was found with the naked eye, or later microscopically, to confirm the earlier diagnosis of general paralysis, the morbid appearances being only those of an ordinary case of chronic insanity.

An attempt was made to elucidate her family history, but no evidence of chorea or insanity in her family was obtained, the information gathered being very unsatisfactory.

C. D—, female, æt. 40, admitted April, 1911, died in September, 1911. She had a previous attack six years previously. Her only child was born three and a half years before, and since then she had undergone three uterine operations, apparently curettings.

On admission she was excited, showed marked delusions of grandeur, and was very emotional. She was very anæmic; gait unsteady; speech

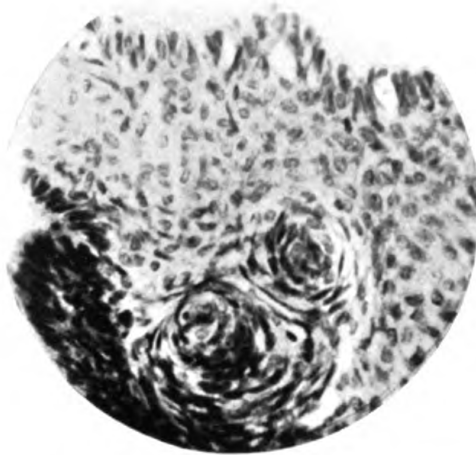


FIG. 1 (Case 1).—Main tissue of tumour giving rise to whorls and to a columnar pseudo-epithelium. Note tendency to cyst-formation beneath latter. Magnified $\frac{1}{2}$ in. \times No. 4 oc.

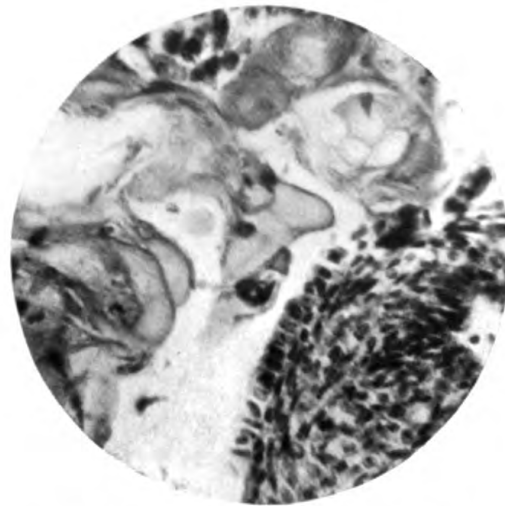


FIG. 2 (Case 1).—Both kinds of tissue shown side by side. Nuclei of large cells practically non-existent. Magnified same as Fig. 1.

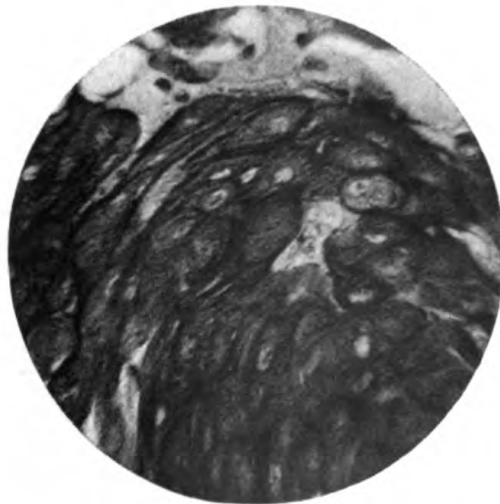


FIG. 3 (Case 1).—Part of large whorls. Magnified same as Figs. 1 and 2.



FIG. 4 (Case 3).—Organisms in brain, mostly in pairs. \times 750.

To illustrate Dr. J. R. PERDRAU's paper.

slow and deliberate ; deep reflexes much exaggerated ; reaction of pupils to light normal ; general tremors fairly well marked, especially of lips ; calf muscles tender to pressure, etc. In view of these signs, the possibility of her being a case of general paralysis was not lost sight of from then onwards. She was a little quieter at first, but not for long, and later became very emotional, and was very depressed at times. She became gradually weaker and more ataxic, complained of pain in the back, and required some help to walk. Towards the middle of August, from being intensely exalted and emotional, she became quickly stuporose, and had to be kept in bed. She lost control over her sphincters, sensation became much blunted, blebs formed on the heels, and she developed diarrhoea with pyrexia. Both the latter—*i. e.* the diarrhoea and the fever—increased and were present until death.

There was nothing to suggest dysentery or any ordinary fever. Typhoid was excluded clinically, and by the Widal reaction ; a blood-count, total and differential, showed an increase in the eosinophiles only. She developed great difficulty in swallowing towards the last, death resulting from complete exhaustion in September, some hyperpyrexia being present towards the end.

We were allowed to make a *post-mortem* examination of the brain only. No signs of general paralysis were found with the naked eye nor subsequently by the microscope. Membranes were quite normal, not even congested ; cerebro-spinal fluid normal. The only unusual feature was several small pink areas on the surface of the cortex of the cerebral hemispheres, especially over the vertex. Although the *post mortem* was held well over twenty-four hours after death, the brain was well preserved. Pieces of the brain were fixed in the usual way. The most obvious microscopic appearance was complete chromatolysis, together with the presence of a large bacillus scattered generally through the brain-matter, both grey and white. As it was too late for attempting a culture of the organism, its identification became impossible. It was, however, Gram-negative and non-acid-fast, stained evenly, possessed slightly rounded ends, and was seen to be often in pairs.

We were then no nearer a solution of the nature of the disease she had suffered from, and there matters remained until some eighteen months later, when cases of pellagra were reported from various asylums in this country. One feature in the appearance of the patient, which we had thought too trivial to mention in the case-book, was then recalled. She had shown an extreme condition of "sunburn" of the backs of both hands and also of the face, especially of the forehead. It was all the

more remarkable as she was admitted in early spring, and although she did not go out of doors much in the latter part of her illness, the condition progressed, and towards the end the skin of the back of the wrists was beginning to crack. The "sunburns," the time of onset—*i. e.* early spring—the peculiar mental and nervous signs, and the terminal diarrhoea are, to say the least, very suggestive. As regards the micro-organisms, I should not like to say more than merely record their presence some twenty-four hours after death, as the possibility, if not probability, of a *post-mortem* dissemination must be remembered. Besides, if the organism was at all connected with pellagra, it would be very extraordinary indeed if it had not been observed before, as it stains easily with aniline dyes, and is visible even with the low power of the microscope. On the other hand, the pink areas on the surface of the brain seem to point to a vital reaction, *viz.* an encephalitis, although these areas could only be recognised with difficulty under the microscope by their congested vessels. The terminal hyperpyrexia and complete chromatolysis also seem to point to the same conclusion.

In these three cases, who all died in 1912, a negative Wassermann reaction would undoubtedly have set one on the track of some other disease, but opportunities for this and other serological examinations were not then available.

That the three diseases here considered do resemble general paralysis has long been known, and frequent reference to that fact is found in medical literature. Mott (1) says that pressure of a tumour, usually an endothelioma, on the left frontal region of the brain may produce a condition resembling general paralysis. He also mentions the fact that such tumours may show close resemblance to a carcinoma, owing to their alveolar character.

It is especially in Huntington's chorea that a resemblance is most marked, and in asylums it is not uncommon to find in such cases that a diagnosis of general paralysis had been made on admission some twenty to thirty years before; whilst some writers have even gone so far as to suggest that Huntington's chorea is a hereditary form of general paralysis.

In the second case under review a history of hereditary predisposition was not obtained, and it would seem as if Huntington's chorea cannot be differentiated clinically from isolated cases of mild chorea with stereotyped movements and insanity.

There is now in the Dorset Asylum an old woman, who shows marked stereotyped movements, who, on admission at the age of thirty-eight in 1873, suffered from a recent right-sided hemiplegia, which only began to clear up some ten years later, when she was found to show all the typical signs of general paralysis, and was then looked upon as a case of that disease. Choreiform movements, chiefly of head and arms, began to appear then and have persisted ever since. In her case, too, no evidence of hereditary chorea can be obtained.

Osler (2) thinks that these isolated cases of chronic adult chorea are indistinguishable from Huntington's chorea, and should be classed with the latter.

In cases of pellagra, too, its occasional close resemblance to general paralysis has been often referred to. Tanzi (3) describes special forms of that disease under the names of pseudo-progressive paralysis, pseudo-tabes, etc. It is interesting that he refers to the terminal diarrhoea as a pseudo-typhoid.

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Occasional Notes.

The Sixty-eighth Report of the Commissioners in Lunacy for England and Wales, 1914.

FROM the tone of this report it is surmised that its successor will be of somewhat different form and substance. Indeed, it would appear to contain both its own obituary notice, and a *lettre d'envoi* of a new form of report to come.

It is thus with not a little feeling of regret that we peruse its pages, knowing that it is for the last time we can linger over its courteous and strictly accurate language, and absorb something of the sincerity, the sense of responsibility, and dignity which imbues the body whose work is there recorded.

The disappearance of the old Board of Commissioners and its submergence in the newly created Board of Control is a definite landmark in the history of the progress of psychiatry

in this country; just as its appearance, in 1845, was the harbinger of a period of progressive improvement in the care and treatment of the insane, and which witnessed the triumph of an enlightened humanity over the twin forces of superstition and cruelty—a triumph largely due to the work of the Commissioners as a body, but perhaps more so to the personal influence exerted by individual members during their visitations throughout the country.

The Commissioners on their creation appear to have adopted definite ideals, which were probably much in advance of the popular thought of the times, such as the supremacy of medical care and kindly treatment, the prevention of unnecessary and unjust detention, the restriction of methods of restraint and seclusion, the provision of suitable accommodation and the exercise of all due economy in so doing, the affording of legal protection to the insane as regards property, the improvement of asylum administration and the status of the staff, etc. We offer them our tribute of admiration for the consistent way they have throughout “stuck to their guns,” and acted up to their ideals, in spite of the difficult conditions under which they have worked. They have had a generous share of criticism and opposition, but nevertheless have good reason to be proud of their achievements, and both past and future generations owe them a debt of gratitude.

The decease of the Commissioners in Lunacy is really more of a re-incarnation, and not a death due to degeneration and decay. They, amongst other influences, have been an active agent in the growth of a volume of public opinion which held that the time had come for the broadening of our conception of those who ought, by reason of mental disability, to receive the protection of the State for the good of the Commonwealth. The spirit sustained by the humane work of the Commissioners bore good fruit, a further instalment of the reply to the query, “Am I my brother’s keeper?” was forthcoming, and the feeble-minded were to be gathered in, an enlargement of work out of all proportion to the capacities of the public bodies, as then constituted, in whose care were the mentally afflicted.

It was thought wise to create a new authority, hence the birth of the Board of Control, and to incorporate in it the Commissioners in Lunacy.

It has not been without some anxiety to those to whom the

care of the insane has been entrusted that these changes have occurred. The great matters for concern were: "Would the same spirit which had actuated the Commissioners in Lunacy in their dealings with the insane continue in the same measure to pervade the work of the new body in its more comprehensive field of activity?" and "Would the interests of the insane suffer from being not the only work of the new authority?" Another anxiety was the kind of influence which would dominate the policy of the new Board—medical, lay, legal, etc.

From the *personnel* of the newly created Board, we have good reason to hope, if not to firmly believe, that all such and similar questions will be answered satisfactorily, and that time will show the wisdom of Parliament concentrating in one body work very largely of the same nature, and that the great ideals of the old Board of Commissioners will not only survive but be rejuvenated, and flourish exceedingly in the new order of things, strengthened and not weakened by contact with larger activities, new aspirations, and recent developments of social progress.

The coming into operation of the Mental Deficiency Act, 1913, on April 1st, 1914, is duly reported, together with a brief account of the scope of the new Act, and the constitution, powers, and duties of the new Board of Control.

Following this is a short, but succinct, history of the work of the Commission established in 1845, down to its decease in 1914, which forms valuable reading. This entails a description of the growth of lunacy and of asylum accommodation—one being a necessary corollary of the other.

County and borough asylums, licensed houses, registered hospitals, criminal asylums, institutions for idiots, naval and military hospitals, are dealt with in various sections, forming a valuable historical retrospect. It is most interesting when studied in conjunction with the last Presidential Address.

It is often said that history repeats itself, and modern suggestions may unconsciously be mere repetition of occurrences in the past. We read that, at Guy's Hospital, "in 1797 a special 'lunatic house' was built, and the hospital continued to receive into these wards insane patients until 1859, when the wards were devoted to other purposes, the few patients

therein remaining being, by direction of the Governors, sent to workhouses, a measure against which the Commissioners in Lunacy protested." Later occurs: "It will be noted that some of these institutions for the insane were established in connection with general hospitals and infirmaries, *e.g.*, the special wards at Guy's Hospital, and the Royal Infirmary, Manchester, and the 'lunatic hospitals' at Liverpool, Northampton, and Oxford. Although this is of interest, as showing the conception of insanity as a disease needing remedial treatment has long prevailed, yet the early records show how unenlightened, and, indeed, inhumane, such treatment often was."

We are not very sure that the same, in a less degree, would not happen now were the insane again handed over to medical practitioners who are without special training. There are few of us who have not been, from time to time, shocked at the suggestions made for the treatment of the insane by individuals, medical and otherwise, of well-known kindly dispositions. Knowledge of the insane and their management is essential to their proper and humane treatment, without which well-meant kindness can readily and unwittingly become cruelty.

The statistics of the insane are analysed by the same methods as in former years. No new or outstanding facts are brought to light this year. We are always specially interested in the ratio of the first admissions to the population. In 1913, it was 4.99 per 10,000, or 0.26 below the average rate (5.15) during the past decade.

The Commissioners, following the practice of previous years, again devote special attention to one particular aspect of their work. This year the occurrence of syphilis in relation to insanity, and also of general paralysis, is selected for detailed consideration.

The whole value of the statistics regarding syphilis as an ætiological factor in mental diseases depends upon the data they are prepared from, especially as to what is regarded as evidence of acquired syphilis. We know now quite definitely that general paralysis is due to syphilis, but statistics regarding syphilis and general paralysis by very competent observers have varied enormously. We are not inclined to value very highly the statistics from which the Commissioners obtain their information. Nevertheless, from the material at their disposal, the Commissioners make some highly instructive deductions. Pro-

bably nothing short of a Wassermann test on each admission would provide any reliable data. In this connection, some work done at the Warren State Hospital is interesting (see vol. lxi, p. 132). Excluding general paralysis, Is the proportion of syphilis any higher in the insane than in the general population? This would appear to be the starting point of any inquiries regarding the influence of syphilis in the causation of insanity.

The Commissioners are dealing with much more concrete material when considering the incidence of general paralysis. The disease averaged about 2.4 *per cent.* of the total number of patients in residence in the county and borough asylums during the last fifteen years. Of pauper patients, general paralysis was diagnosed in about 7.5 *per cent.* of the admissions during 1908-12. Excluding cases other than "first attack," the percentage was 11.9 males and 2.1 females. The general deductions to be drawn from their investigations are that the incidence of general paralysis is greater in borough than county asylums, and that, as a rule, it is greater in those county asylums which receive patients from large industrial centres. Low percentages are nearly always met with in purely agricultural districts. No less than 90 *per cent.* come under care between twenty-five and fifty-four years of age, and 42.7 *per cent.* between thirty-five and forty-four. The average death-rate in asylums from this disease during the years 1903-12, calculated on the average number resident, has been 2.29 *per cent.* males and 0.60 *per cent.* females.

Attention is devoted to the difficulty experienced in obtaining assistant medical officers. It is suggested that the improvement in the future prospects of those entering the service is more important than a higher initial salary. Permission for the senior and second to marry is advocated, also the provision of suitable detached residences for married medical officers within the grounds of the institution. All these suggestions are good, excepting that it hardly appears necessary that the latter should actually be within the grounds of the asylum. They should undoubtedly be within easy distance of the building in case of emergency. Study leave is also advocated. Regarding this, we think greater advantage might first be taken under present conditions of the reasonably near situation of some of the medical schools to the asylums.

It is never possible in the pages of the Journal to comment on every subject touched upon by the Commissioners in their Annual Report. We have, however, sufficiently indicated that the Sixty-eighth, and last, Report of the now deceased Board of Commissioners in Lunacy, is in no way inferior in interest or importance to its predecessors, but, on the contrary, is strongly indicative that the Board of Control has absorbed a body of men, fully alive to their grave responsibilities, and in good trim, not only to continue the work which has engaged them in the past, but to co-operate vigorously in the elucidation of those larger problems which face the newly constructed and enlarged authority.

Grants for Psychiatric Research.

AT the last meeting of the Council of the Medico-Psychological Association an application was made by the new Research Committee of the Association that grants should be made from its funds towards research work (on similar lines to those adopted in the case of the British Medical Association). The Council approved of the principle, and intimated their willingness to receive applications, each of which would be judged on its merits, and an award made accordingly.

The value of research work has up to this been greatly under-estimated; the view of its absolute necessity, if real progress is to be achieved, has hardly been seriously entertained. This is especially the case as regards psychiatry, and yet it is, perhaps, this department of medicine where it is most urgently needed. Some splendid work has been, and is being, accomplished by voluntary effort, but neither the profession nor the general public have any equitable right to appropriate to their own advantage the fruits of the industry of others in which they have taken no share. Every right-thinking person must, therefore, regard with the utmost satisfaction the action of the Council in sanctioning grants from the funds at their disposal for this most important object.

Original investigators, pioneers in research, are rare. They must be specially gifted with the faculty of imagination, capable of limning out the problems best worth considering, and of devising means and methods for their successful solution. They must be endowed with keen powers of observation and,

at the same time, ability to interpret what they observe: the seeing eye and the understanding heart. But besides these gifts, which are those in which they specially surpass the mass of their fellows, they must pre-eminently possess those qualities which the Prime Minister, in his eloquent appeal to Parliament and to the nation for their support, material and moral, in the most difficult military crisis which this country has ever had to face, described as belonging to the "spiritual" side of our national character: as "ancient, inbred qualities of our race, qualities of self-mastery, self-sacrifice, patience, tenacity, the dominating sense of duty, unfailing faith, inflexible resolve." What language could better describe the principles which animate the souls of those who are engaged in a different kind of warfare—in the fight against our relentless enemies, disease and death; whose lives are spent in the endeavour to wrest from Nature her secrets, and to discover the source and origin of those malignant disorders which work havoc, and too often irremediable disaster, in the delicate framework of the human body; and not only in this, but in efforts, efforts which happily have often been crowned with success, to find a remedy against these insidious foes?

We cannot for a moment suppose that our small band of investigators are actuated by any mercenary motives. The excellent work they have already achieved without any expectation of material compensation is enough to dispose of such an assumption. As a class, there are probably few who are less influenced by the *auri sacra fames* which is the main incentive in many other departments of work. But everyone likes to know that honest work will meet with appreciation. And, nowadays, it is to be feared that the only appreciation which carries weight, at any rate with the general public, is that which is capable of being expressed in terms of hard cash. But, apart from any considerations of this kind, it is both just and fitting that work which is capable of benefiting humanity to so great an extent should be adequately compensated, and that every encouragement should be given to those who have special aptitude for pursuits of this kind to prosecute their studies under the assurance that their careers will not suffer while they are employing their talents in adding to our practical knowledge of disease, with, as a result, a diminution in the suffering of their fellow-men. The funds of the Association

could hardly be employed for a more useful purpose, and the action of the Council is sure to have the hearty approval of the entire Association.

Part II.—Reviews.

Fifty-sixth Annual Report of the General Board of Commissioners in Lunacy for Scotland (being for the year 1913).

The first portion of the report gives the usual statistical information in regard to lunacy in Scotland. On January 1st, 1914, there were in Scotland, exclusive of insane persons maintained at home by their natural guardians, 19,346 insane persons of whom the General Board had official cognisance. Of these, 2,624 were maintained from private sources, 16,660 by parochial rates, and 62 at the expense of the State. Since January 1st, 1913, an increase of 158 had taken place. Of the grand total given above, there were resident in the Criminal Lunatic Department of Perth Prison 62 (an increase of 6 during the year), and in training schools for imbecile children 602 (an increase of 22); and these are classed as the *non-registered* lunatics. The *registered* lunatics—those resident in asylums (royal, district, private, and parochial), lunatic wards of poorhouses, and in private dwellings—were 18,682 in number; and in regard to them the following changes had taken place during the year 1913: (1) There was a total increase of 130, due to an increase in private patients by 27, and an increase of pauper patients by 103. (2) The total increase of 130 arose from an increase in the number in establishments by 208, and a decrease of the number in private dwellings by 78. (3) The increased number of 208 in establishments arose from an increase of 29 private patients, and an increase of 179 pauper patients. Of pauper patients in establishments, the average annual increase during the preceding five years was 199, and, therefore, the increase of 179 during the year 1913 has been less than the average annual increase of that quinquenniad. During the year 1913 decreases in the number of pauper lunatics occurred in 14 counties or urban areas, and increases in 20 counties or urban areas. The proportion per 100,000 of general population is for private lunatics 52, and for pauper lunatics 342, or a total of 394 for the two classes together.

Patients in asylums and lunatic wards of poorhouses.—In arriving at the number of persons admitted to these establishments, it is necessary to exclude the cases which mean merely a transfer from one establishment to another, the number of these during the year being 371. With this correction made, the number of patients admitted to establishments during 1913 was 3,682, (private 580, pauper 3,102). This is an increase of 213 above the previous year, and is the highest number of patients admitted in any single year to these establishments for the insane in Scotland. The proportion of the admission rate per 100,000 of the general population was 77·8. The number of patients

who had never previously been on the register, and who were admitted for the first time to these establishments, was 2,806 (private 456, pauper 2,350); and the proportion per 100,000 of the population was 59.2 (private 9.6, pauper 49.6). On the whole, with marked oscillations, there has been a general tendency to increase, both in the total number of cases received, and in the proportion of first admissions to the general population. The number of patients discharged recovered during the year was 1,421 (private 222, pauper 1,199), being an increase over the preceding year of 24 private and 109 pauper cases. Though the recoveries were thus more numerous in 1913 than in 1912, yet the percentage of recoveries on admissions (exclusive of transfers) continues to be distinctly lower (by 4.2 *per cent.*) than it was in the quinquenniad, 1900-4. The number of cases discharged unrecovered was 537 (private 144, pauper 393), the figures showing that there was an increase of 8 in the private cases so discharged, but that the number of paupers so discharged was the same as in the preceding year. The percentage of cases discharged unrecovered, calculated on the number resident, was 6.2 for the private patients, but only 3.0 for the pauper patients. The number of deaths during 1913 was: private 196, pauper 1,320, total 1,516, showing a decrease of 32 private, and an increase of 25 pauper deaths on the corresponding figure for the year 1912. The proportion *per cent.* of deaths calculated on the number resident was 8.4 for the private, and 9.9 for the pauper cases, or for the two classes taken together 9.7.

Voluntary patients.—Patients admitted to establishments on the voluntary system are not registered as lunatics, and are, therefore, not included in the figures given above. The number of these received during the year 1913 was 112 (which is 8 above the average annual number admitted for the ten years, 1904-13); and the number resident, January 1st, 1914, was 148. The General Board "have for many years been able to state that nothing had occurred to indicate any difficulty or disadvantage traceable to the presence of this class of patients in asylums; and we continue to be of opinion that it is a useful provision of the law which permits persons who desire to place themselves under care in an asylum to do so in a way which is not attended with troublesome or disagreeable formalities."

Patients in private dwellings.—On January 1st, 1914, the number of patients in private dwellings under the cognisance of the General Board was 2,943 (private 110, pauper 2,833). This shows a decrease during the year 1913 of 2 private and 76 pauper cases. The decrease is probably due to a combination of several causes, but may, it is hoped, prove to be temporary only, as the system of private care is an important part of the Scottish lunacy arrangements, and provides satisfactorily and economically for a considerable proportion of the insane. The two deputy-commissioners who are specially concerned in supervising these cases both point out that there is little real difficulty in finding a sufficient supply of suitable guardians for the patients.

Training schools for imbecile children.—There are at present in Scotland two institutions which provide accommodation and specialised training for mentally defective children—one at Baldovan (near Dundee), and the other at Larbert. Both of them have done good

work for many years, though their usefulness has been limited by lack of funds; but the recent coming into force of the Mental Deficiency Act will doubtless have the effect of increasing largely the demand for accommodation for children of this class, and of enhancing the scope of action of the training schools.

Expenditure for lunacy purposes.—Much detailed information is, as usual, given in regard to expenditure. In the district asylums the provision and upkeep of land and buildings is met by a special assessment in the lunacy districts, and for the year ending on May 15th, 1913, the rate varied in different instances from £5 10s. 5d. to £35 13s. 11d. per patient, the average being £16 1s. 3d. The conditions which lead to the great variation in the rates in different districts are such as amount of land provided, difference in cost of building in different localities and at different times, and difference in the policies followed as to the completeness with which the various requirements are provided, whether fully at once, or gradually by successive additions. The expenditure from parochial rates for the maintenance (that is, the feeding, clothing, and management) of patients in district asylums does not show the same degree of variation in different districts, and ranges from £21 os. 8d. to £32 os. 5d., the average being (after deduction of farm profits, etc.) £26 3s. 4d. The patients in lunatic wards of poorhouses and in private dwellings, being of a more chronic and less troublesome kind, do not call for the same amount of expenditure; and while the rate of maintenance for pauper lunatics in all asylums, and in training schools for imbecile children, was on an average 1s. 6d. daily, for patients in lunatic wards of poorhouses it was 1s. 3d., and for patients in private dwellings it was 1s. 0½d. The tables given in the report show that for the maintenance of 19,139 pauper lunatics who were under care for longer or shorter periods during the year in asylums, lunatic wards of poorhouses, and private dwellings, and for other expenses connected with them, a total sum of £432,534 was paid, of which £346,422 was for maintenance in asylums (including institutions for imbecile children), £19,351 was for maintenance in lunatic wards of poorhouses, £54,429 was for maintenance in private dwellings, and £12,332 was for certification, transport, and other expenses. Of this expenditure, £23,378 was repaid by relatives and others, and £116,389 was contributed by the Government grant. The net expenditure by Parish Councils on the maintenance of patients was thus £292,767, which is £3,871 more than the expenditure of the previous year. As, since 1892, the amount contributed by the State (usually called the Government grant) has been a fixed sum, while the number of patients among whom it is distributed has been rising, the average amount paid per patient has been gradually falling, and for the year ending May 15th, 1913, it was 2s. 11d. per week, which is ¼d. less than in the previous year.

Legislative and administrative changes.—The Mental Deficiency and Lunacy (Scotland) Act was passed by Parliament in 1913, and modifies and extends very largely the powers and duties of the General Board of Commissioners. The main purpose of the Act is to make provision for the care and management of mental defectives, and to place them (in addition to the insane already provided for by former lunacy statutes)

under the supervision of the General Board. The local administration of this portion of the Act is shared in the different districts between the School Boards, the Parish Councils, and the District Board of Lunacy, the last-named being called in future the District Board of Control. The Act also includes amendments of the lunacy statutes intended to meet defects found by experience in the working of these statutes, and to widen their provisions. These amendments are sketched shortly in the report, and refer mainly to improvement of details in the ordinary administration of the Acts, but bring up also some points of special interest, of which the following may be mentioned: (1) A change in the allocation of the maintenance expenditure for pauper lunatics, by which it will, instead of being met wholly by the Parish Councils as in former years, be divided equally between them and the District Boards of Control; (2) for an established officer or servant in an asylum time previously served in a parochial asylum or in the lunatic wards of a poorhouse shall be counted for superannuation purposes; and (3) statutory power given for District Boards of Control to contribute towards the support of any pathological laboratory having for its object the investigation of the pathology of mental diseases.

In Scotland the Mental Deficiency and Lunacy Act did not come into force until May 15th, 1914, and accordingly the effects of its provisions, and the action resulting from them, do not fall within the present report, but will have to be considered in detail in future years. Under the Act the designation of the General Board is changed; it becomes the General Board of Control for Scotland, and the report now under notice is, therefore, the last to appear as being presented by the General Board of Lunacy. The opportunity is therefore taken to include in the report a review of lunacy administration in Scotland since 1857, the year in which the General Board of Lunacy was established. This review is very interesting and informative. Evidence gathered by a Royal Commission, which sat from 1855 to 1857, showed that the number of the insane in Scotland was then estimated at 7,403. Of these 3,328 were more or less under the protection of the existing law, but the majority, 4,075, were not under the cognisance or protection of the law. At that time the seven royal or chartered asylums, which had been founded and were in a great measure maintained by the exertions and benevolence of private individuals, had been in existence for a number of years, and these, and a few of the smaller private asylums or licensed houses, provided for their inmates accommodation and treatment of a satisfactory and even praiseworthy kind. But there were no legislative enactments making it compulsory to supply asylum accommodation for pauper patients, and many of the insane were left in unlicensed poorhouses, in unlicensed private asylums, and (most numerous of all) in private dwellings, where, in the absence of proper supervision, their condition was of a very unsatisfactory and objectionable kind, and exposed them to much suffering and privation. Scotland was thus in the peculiar condition that, while on one side private benevolence had done much for a portion of the insane, the care of the great majority was most inefficient, through the non-existence of any public institutions or supervision for them, and called urgently for reform. As a result of the report of the Royal Commission

the Lunacy Act (Scotland) of 1857 was passed, by which the General Board of Lunacy was constituted, and charged with the general supervision of the insane throughout the country, and provision made for the erection of public asylums in the different districts where required. Each inspector of poor was now bound to intimate to the Board the name and residence of every pauper lunatic within his parish, and in this way the great majority of the insane were brought under the direct cognisance of the Board. The Board further had the power to dispense with the removal of any pauper lunatic to an asylum, and to allow the parish authorities to provide for him under such conditions and regulations as might be laid down by the Board. At that time there were nearly 4,000 insane persons resident in private houses, and, as the asylum accommodation was insufficient to receive them, it was necessary to leave a large number of them still under care in private dwellings, after the necessary dispensation from removal to an asylum had been obtained in the statutory way. As asylum accommodation was gradually provided on a more extensive scale, the leading aim of the Board in the early years of the work was naturally to remove from private houses those patients whose mental condition or peculiarities made asylum care necessary or preferable; and evidently it was considered that much the larger number of the cases would thus be transferred to asylums, while it was suggested that the remainder might be suitably provided for by a scheme of cottage homes in the neighbourhood of each asylum, and under the supervision of the asylum authorities. At the same time, regulations were made for securing that the patients remaining in private houses should receive suitable care and supervision. Experience, however, gradually showed that it was not necessary to aggregate all the insane in asylums, or even to have their cottage homes connected immediately with an asylum, but that, under due regulations, a considerable number of them could advantageously be provided for in ordinary houses scattered throughout the country. In this way there grew up the system of care in private dwellings, which continues to be an important and distinctive feature in the lunacy administration of Scotland. At the present time it provides for over 17 *per cent.* of the pauper lunatics on the roll of the General Board. For a number of the cases asylum treatment has never been necessary, and these remain under private care during the whole time of being on the register. Others, after a period of asylum care, have passed into a more manageable state, allowing of removal to private houses, which helps to lessen the accumulation of chronic cases in asylums, and it is to this procedure that the term "boarding out" more strictly refers.

While the lunacy legislation of 1857 and subsequent years thus led in Scotland to the development and organisation of the system of care in private dwellings for a considerable number of the insane, its most important effect was seen in another direction, in the providing of public asylums throughout the country for those of the insane who require care and treatment of a more specialised kind than can be got in private dwellings. It has already been mentioned that in the royal or chartered asylums Scotland had already several institutions doing excellent work of this kind; but their accommodation fell far short of the requirements, and it was necessary to provide other institutions, which

took the form of district and parochial ⁽¹⁾ asylums. Under the supervision of the General Board, these have been gradually supplied as circumstances required and allowed ; and thus all the districts of Scotland have now public institutional accommodation to a larger or smaller extent at their command for their rate-supported insane cases. During their gradual growth changes of a very important kind have also taken place in the administration of the asylums. The merely custodial element, which was at first unduly, and perhaps unavoidably, prominent, has been replaced by arrangements directed to securing the careful medical and scientific treatment of the mental and bodily conditions of the patients. The following points are mentioned and discussed at some length in the report, as showing the progress made in various directions, and how the improvements have been evolved : (1) Extension of asylum lands ; (2) abolition of airing courts ; (3) the open-door system, and liberty on parole ; (4) diminution in the use of restraint and seclusion ; (5) provision of hospital accommodation ; (6) reform of night nursing ; (7) nursing of male patients by female nurses ; (8) the segregate or village type of asylum ; and (9) observation wards, and pathological laboratories. These may be summed up as showing that for acute insanity medical treatment of a scientific kind is provided on the same lines as in a hospital for any other form of illness, and that for all the insane (chronic and incurable as well as acute) efforts are made to do away with unnecessary and hampering restrictions, and to provide a mode of life as hygienic and favourable as possible by supplying suitable surroundings, occupation, exercise, and other interests, and by making their condition approach as nearly to their home life in health as circumstances permit.

Credit for the important advances in lunacy work above referred to is freely given in the Blue Book to the medical officers of asylums, who have been responsible frequently for originating, and always for carrying out, the new developments, and to the members of the public boards which control local lunacy administration in Scotland, whose interest, humane sympathies, and labour have secured the provisions of these conditions for the benefit of insane patients. At the same time it is due to the wise and far-seeing policy of the General Board that such progress has been possible, and that Scotland has reached the high position it now holds in regard to lunacy administration. That policy has been marked by broad-mindedness, a desire to apply medical ideas to the treatment of lunacy, a readiness to receive and encourage all suggestions for improvement in the care of the insane, and a sympathetic and cordial co-operation with the local officials charged with the work. Scotland has indeed been fortunate in the *personnel* of the General Board during the fifty-six years of its existence ; and, in its enlarged constitution as the General Board of Control, the supervision of the mentally deficient now committed to its care will, without doubt, be as thorough and effective as it has been in regard to the insane.

(1) With one exception the parochial asylums have latterly all been constituted as district asylums.

Part III.—Epitome.

Progress of Psychiatry during 1914.

AMERICA.

By DR. WILLIAM McDONALD, JUNR.

From the advance that is taking place in so many directions these days a few trends attract attention by their comparative newness. Diagnostic tests such as the Wassermann, the Noguchi, the luetin, the colloidal gold colour reaction of Lange, and the cellular analysis of the cerebro-spinal fluid are now being applied far and wide.

The value of these tests will soon be determined. Already it is almost universally admitted that, although a positive response to such tests on the blood serum is, with few exceptions, a reliable indication of syphilitic disease, a negative response is untrustworthy where there is a question of possible syphilitic involvement of the nervous system. Routine examination of the cerebro-spinal fluid, whenever there is suspicion of syphilis of the nervous system, is now made in a large number of hospitals.

The reports of these analyses favour the belief that an absolutely normal fluid generally signifies escape of brain and spinal cord from syphilitic injury, though a number of observers have found pupillary involvement with a normal spinal fluid in subjects who gave a clear history of syphilitic infection, and bore unquestionable syphilitic scars. The spinal fluid may be normal while the blood serum reacts positively. Morbid increase of cellular elements in the cerebro-spinal fluid is seldom lacking in cerebro-spinal syphilis, unless anti-syphilitic remedies have been used diligently, but this increase of cells may be found in many conditions other than syphilis.

It is a daily experience to find cerebro-spinal fluids which react positively to some and negatively to other tests, and occasionally two observers simultaneously testing one fluid find contradictory responses to one form of test used by both examiners.

Lange's colloidal gold test, judging from the reports, is, of all the tests upon cerebro-spinal fluid, the most delicate. When the other tests are positive, the gold test in reliable hands is seldom negative, and it may alone give accurate evidence of syphilis when all other tests are negative, but unfortunately it not infrequently responds positively when all other tests are negative, and when all other evidence is against the assumption of syphilitic infection.

The results of treatment of general paresis, tabes, and cerebro-spinal syphilis with salvarsan, neosalvarsan, and with intra-spinal injections of salvarsanised serum, are being watched with great interest. Reports of these treatments are coming from all parts of the country. As yet opinions are contradictory. Many observers are enthusiastic over the results of their intra-spinal treatment, while others using the same methods are pessimistic concerning their usefulness. There is also much difference of opinion, even among those convinced of the efficacy

of the treatment, as to the mode, technique, frequency, and number of the injections.

It has not yet been determined whether the favourable results obtained are to be attributed to the infinitesimal amount of arsenic which finds its way into the subject's cerebro-spinal fluid, or to the creation of antibodies. Since the amount of recoverable arsenic in the blood diminishes rapidly after the intravenous injection has been completed, it follows that, if the curative quality of the serum depends upon the arsenical content, the strength of this quality would lessen as the interval between the injection of the salvarsan and the withdrawal of the salvarsanised blood lengthened.

If, on the other hand, the beneficial effects are attributable to antibodies, a sufficient period after the injection of the salvarsan and before the withdrawal of the blood must be allowed to elapse in order to permit the antibodies to reach their highest possible development. Thus it happens that there are those who, on theoretical grounds, advocate a reduction of the prescribed one hour interval of the Swift-Ellis method, and others who, on a different theoretical basis, insist that at least twenty-four hours should elapse before the blood is withdrawn.

It has been pointed out by B. Sachs, I. Strauss, and D. J. Kaliski,⁽¹⁾ on the authority of Prof. Benedict, of the Cornell Medical School, who determined for them the quantity of arsenic present in the blood at different intervals after the injection of salvarsan, that the spinal fluid after simple intravenous injection of salvarsan contains a larger *per cent.* of arsenic than is present in the diluted serum used for intraspinal injection. These observers conclude that, whereas salvarsan combined with mercury is the most effective remedy yet discovered for cerebral and cerebro-spinal lues, the intraspinal method of treatment has no advantage over the intravenous.

Several writers have stated that in their opinion the apparent superiority of the results of intraspinal injection is due entirely to the greater number of injections given by those who have used this method. Between salvarsan and neosalvarsan it has not yet been determined which offers the greater promise in these various methods.

To one who views these numerous studies with an unprejudiced mind it seems apparent that the difference in opinion is in a large measure due to the failure on the part of the observers to take into account all of the related data. It is well known that general paresis, as a rule, runs a more rapid course in extremely young adults than in older victims, and it is necessary in all syphilitic infections to consider the age, sex, colour, and condition of the subject previous to the syphilitic infection, previous to the incidence of parietic signs, and previous to the treatment, the amount, duration, and character of previous treatment, and the virulence and direction of attack of the infection.

That these newer modes of treating syphilitic diseases of the nervous system have, on the whole, strengthened and widened the medical resources for control of the disorders is beyond question. It has been my good fortune to see, as a result of repeated injections of salvarsanised

⁽¹⁾ *Amer. Journ. Med. Sci.*, 1914, vol. cxlviii, p. 693.

serum, the reincarnation of manhood in a paretic who, before the introduction of this form of treatment, would have been regarded as hopelessly doomed to dementia ; I have also watched the steady downward progress of other paretics treated as actively, and by the same method, as was the one who was helped ; and I have noted a temporary gain under the same treatment by others who later went the way of the classical paretic.

In time we shall understand the laws underlying such divergent results.

No account of the progress of psychiatry in America would be complete without reference to recent efforts to obtain a better understanding of the conditions underlying juvenile delinquency. Juvenile courts have been established in many cities, and there is a genuine awakening to the infinite good to be accomplished by doing away with the older stereotyped police court methods of dealing with delinquents old and young alike as a class, and by substituting a treatment planned according to the particular needs of the individual. In this work magistrates are co-operating with specialists in psychiatry, psychology, and sociology. Chicago has established a system which offers an excellent example to other municipalities.

Under the leadership of Wm. Healy, Director of the Psychopathic Institute of the Juvenile Court of Chicago, a movement is under way which gives promise of revolutionising criminology as related to both old and young offenders. A paragraph from the *Illinois Medical Journal* (October, 1914, p. 359) is worth quoting in the interest of the "better understanding" which Mr. Healy is seeking to promote :

"With development of these better understandings many remedial agencies have been set at work. In the Detention Home the wards of the court profit by the daily attentions of a physician, a dentist, a corps of teachers, an instructor in physical training, and resident nurses. The court sends to the best specialists all cases of defective vision, and the many other ailments which need attention. It obtains country life for many of those who need it. It runs a definite employment agency, which endeavours to place the individual at work for which he is especially fitted. It aims to place in proper institutions those who are afflicted. Above all, it endeavours to co-operate with relatives and awaken them to the needs of their own kin. So it has come about that in the sessions of this court one may hear considered the correlations between defective vision and failure in school and in employment, which, of course, lead directly to delinquency. One may hear discussed the relationship of epilepsy to moral unreliability, of the effects of various debilitating habits in producing mental instability or lethargy, or the connection between mental defect and criminality. All these, and many other things, should be considered by officers of a court, as well as the more obvious effects of bad companionship, lack of parental control, and other weaknesses in environmental conditions."

There are indications on every hand of an awakening to the importance of attending to children sick in mind, not alone those whose behaviour brings them into conflict with the law of the land, but any who give signs of becoming aught else than normal citizens.

Anxiety as to insanity in adults of the next generation may be justly given up to the extent to which we can guarantee the mental health of the children of to-day. L. Pierce Clark,⁽²⁾ under the title "Psychopathic Children: What New York City is Doing for Them," has written a paper pleading for "more intensive study of child, and even infantile, life." He recommends the establishment in the public schools of all large cities of a department "for clinical study of the frank psychopathies of school-children."

Clark summarises a tentative scheme for examination of psychopathic children as follows:

"NAME, AGE, FATHER'S AND MOTHER'S NAME, ADDRESS.

The child's main difficulties.

School record in normal classes.

Intellectual tests: *Simon-Binet and its modifications.*

Family history: *Data obtained from parents by physician and social worker.*

Personal history: *Chronologic physical development of the patient from birth, made up of facts obtained by physician, social worker, and from parents.*

Physical and neurologic examination.

Mental examination: *Inquiries and observations regarding general appearance, manner, conduct, etc. Mental development of infancy and childhood. Personality study. Patient's own story in regard to his difficulties, and how he thinks they may best be set right. Social report on environmental, social, and economic conditions.*

Other facts concerning the child.

Summary of the case.

Treatment and correctional methods recommended.

Observation in ungraded class.

Results of re-examination."

To find some measure whereby may be estimated the importance to be ascribed respectively to inherited tendency, previous experience, personality, and immediate stress as factors in the production of insanity in the individual is the earnest endeavour of many American psychiatrists. Effort in this direction may be seen not only in studies concerning psychopathic children and juvenile delinquency, but also in the broad and comprehensive methods lately advocated for the investigation of mental disorders in adults.

August Hoch, Director of the Psychiatric Institute of the New York State Hospitals, continuing his investigations⁽³⁾ of the mental make-up of persons who develop mental disease, has, with George S. Amsden,⁽⁴⁾ published another paper on the relation between personality and the psychoses. The authors suggest, as a guide, a large number of ques-

⁽²⁾ *New York Med. Journ.*, April 11th, 1914.

⁽³⁾ Hoch, August, "The Constitutional Factors in the Dementia Præcox Group," *Rev. Neurol. and Psych.*, August, 1910.

⁽⁴⁾ Hoch, August, and Amsden, George S., "A Guide to the Descriptive Study of the Personality, with Special Reference to the taking of Anamneses of Cases with Psychoses," *State Hospital Bulletin* (N. Y.), November, 1913.

tions to be put to those from whom information is sought regarding that "period of the patient's life in which compensation, so to speak, has not yet started to break down, *i.e.*, the so-called normal period of the lives of such individuals, and not the actual mental disorder in the stricter sense."

Under the headings of this guide are questions involving:

- "(1) Traits relating essentially to the intelligence, the capacity for acquiring knowledge, the judgment, etc.
- (2) Traits relating essentially to the output of energy.
- (3) Traits relating essentially to the subject's estimate of himself.
- (4) Adaptability toward the environment.
- (a) *The more striking traits which on their abnormal side interfere in a rather general and striking way with contact with the environment.*
- (b) *Traits which in a more specific, but in a less obvious, way interfere with contact with the environment.*
- (c) *Traits which show to what extent the subject lays bare to others his real self.*
- (d) *Traits which in normal proportions are useful qualities, but in exaggerated form interfere with efficiency.*
- (e) *Traits which show a tendency to active shaping of situations, or the reverse.*
- (f) *Traits showing the attitude towards reality.*
- (5) Mood.
- (6) Instinctive demands, traits which are more or less clearly related to the sexual instinct.
- (a) *Friendship.*
- (b) *Attachment to members of the family.*
- (c) *Attitude towards the other sex.*
- (i) *General.*
- (ii) *Specific sexual demands.*
- (iii) *General traits derived from sexual instinct, or reactions against its assertion.*
- (7) General interests.
- (8) Pathological traits."

Investigations such as those mentioned above relative to delinquency and mental disorder in children, and concerning the personality of adults previous to the outbreak of their mental disorder, indicate the desire of American psychiatrists to acquire a broad knowledge of the fundamental factors of mental disorder. These researches contrast favourably with the weird demonstrations of the pseudo-scientific methods of so-called psycho-analysis as preached by Freud, and so voluminously exploited in the medical journals of recent years. Admitting the good intent of Freud and his disciples in seeking the first wayward tendency of the mind in its earliest sexual awakening, it must ultimately be apparent that such efforts deal with but a limited number of an infinite variety of experiences contributing to the formation of mental and moral character.

Despite the suggestion of delicate subterfuge in a system of examination which depends largely upon the analysis of time reactions in the responses of the subject to most innocent appearing stimuli, the disregard of scientific precautions against error of interpretation, and the eager acceptance of any and all reactions capable of being forced into

the artificial scheme or dream of the investigator, are almost ludicrously clumsy.

At the risk of being declared unprogressive, ultra-conservative, and even stupidly unappreciative of the finer developments of psychologic research, I have regularly contended in these yearly contributions, and in other publications, that no possible advantage over a straightforward common-sense approach to the problems of psychiatry could be found in the chimerical experimentation used by many who are seeking information about subconsciousness. Among investigators who would regard with scepticism the uncanny revelations of crystal gazers, or the weird testimony of one who had been affected by the unnatural environment of a spiritualistic *séance*, are those who pursue their questioning in a darkened room, where the silence can only be broken by the subdued voices of the examiner and the examined. In the effort to shut out all distractions they are introducing the same element of strangeness which, because of its incalculable emotional effect, destroys the reliability of the testimony of the spiritualistic medium.

The part which the stop-watch plays in measuring the time elapsing between question and answer has supplied an appearance of scientific exactness to the reaction time examination for which the term *psycho-analysis* has been so widely appropriated. The use of an instrument of precision, lending to the examination something of the dignity of laboratory technique, sufficed to blind many earnest workers to the untrustworthiness of the entire procedure.

Moreover, in America, as I have no doubt elsewhere, eager but not sufficiently discriminative students have accepted without question the dicta—false, despite their deceptive tone of logical directness—that the readiest approach to subconsciousness is through subconscious channels, and that errors of conscious activity resulting from morbid repression of subconscious emotions and ideas can best be corrected by elevating the repressed subconscious factors, and harmonizing them with the higher conscious life, through direct appeal to the subconsciousness in hypnotic and hypnoidal states.

That the vastness of the nonsense of such arguments should escape the recognition of many honest workers who have accepted them is remarkable. It would have been as reasonable to insist that Columbus could discover new realms only by forsaking ships, well known in the old world, unknown in the new, and by climbing up one moonbeam and down another to the promised land. It would be as plausible to declare that the only mode of preventing the repetition of a child's outbreak in uncontrollable anger is that of first deliberately inducing the repetition and then appealing to the child in anger. According to such principles, the correction of insomnia could best be accomplished by waiting until the sufferer slept and then awakening him to explain the error.

Fortunately, common-sense may always be depended upon to correct ultimately the temporary erraticisms of scientific endeavour, and it is highly satisfactory to find, in reviewing American psychiatric literature of the year 1914, that, as compared with the years immediately preceding, the exploitation of the flimsy theories of so-called psycho-analysis has largely given place to the reports of more sober-minded investigations.

FRANCE.

By Dr. RENÉ SEMELAIGNE.

DURING the last year, scientific activity seemed to be suspended by the war; the societies devoted to the study of mental diseases could not meet for want of members, and the publication of specialist journals was temporarily postponed. It is not yet the proper time for examining the psychiatric consequences of the present events, and such a study will be more pertinently carried on subsequently to the conclusion of hostilities. So an epitome of French psychiatry only covers a period of seven months, from the beginning of January to the end of July.

A new Lunacy Act, voted in 1907 by the Chamber of Deputies, was considered at great length by a Committee of the Senate, and reported by M. Strauss; the debate opened at the end of 1913. According to it the reception of any alleged insane person in a public or private establishment is only provisional, and has to be submitted within six months to the judicial authority. A discussion arose about the use of the words "mental alienation" and "mental affection." In reality the Bill was entitled as concerning *aliénés*, while Part I provided that help and proper care should obligatorily be given to any patient suffering an *affection mentale*. So the debate was postponed pending fuller information, and the Government decided to take the opinion of the following societies: *Académie de Médecine*, *Société clinique de Médecine mentale*, *Société de Médecine légale*, *Société Médico-Psychologique*, *Société de Neurologie*, *Société de Psychiatrie*. The answers were approximately the same, *i. e.* that the expression mental affection includes any person suffering from mental disorder; amongst such affections some merely require help and care, but some others necessitate legal intervention, and in their case the term mental alienation is properly applicable. Besides the *Société Médico-Psychologique* conclusively opined that the law of 1838 specifically providing for legal action, and safe-guarding the liberty of the individual, seemed to be quite sufficient; but in order to protect more efficiently the community it might be expedient to add some judicial rules concerning criminal lunatics.

The committee's reporter, anxious to obtain a prompt vote for the lunacy law, had quoted public opinion and the apprehension of arbitrary detentions. Dr. Gilbert Ballet, Professor of Psychiatry in the Faculty of Medicine of Paris, at a meeting of the Academy of Medicine, defied anyone to give a genuine case of such a detention. Subsequently to the meeting, four cases of pretended arbitrary detention were submitted to him. The first case was that of a melancholic patient, who secondarily developed ideas of persecution, with refusal of food and acts of violence, and was placed in a private asylum and artificially fed. A journal had violently protested. In the second case the patient was the subject of intermittent attacks of mania, which during some years had not been very violent, so his wife took patient out in spite of a continuance of the malady; but he became more excited, had megalomaniac ideas, provoked a violent scene on a railway, and was confined in a *maison de santé*. Improved by appropriate treatment, and restored to liberty, he was protesting against his detention. A third person wrote: "Three ruffians

named Garnier (the scoundrel died since that time), Legras, and Magnan are pleased to comply with the wishes of the grossly vicious French police, and facilitate those monstrous acts of cowardice." Another letter began as follows: "I suffered three confinements in a lunatic asylum, because I asserted that I was a Bourbon, son of the Count of Chambord and of the Duchess of Alençon, with evidence in support." The mental disturbance of such people seems to be clearly apparent to anyone possessed of common sense, but in any case of confinement in an asylum the opponents generally consider their own interest in preference to the benefit of the patient, and some journals eagerly accept every scandalous report. Public opinion sometimes is right and sometimes wrong, and in a scientific discussion one has not to consider such a matter. In a meeting of the Academy of Medicine Dr. Gilbert Ballet proclaimed that, even if public opinion was wrongfully becoming excited by a chimerical case, the members of the Society ought not to be troubled by that fact; they had not to look at an electoral district as members of Parliament, but only to give heed to the truth, and the benefit of the patients.

The Lunacy Act, 1838, so violently and unjustly censured by incompetent people, was suggested by Esquirol and Ferrus. Since that time medical science has progressed, and many ideas have had to be modified in order that the law might be improved, but it does not seem necessary to radically reconstitute it merely in order to please some politicians, and without any real benefit to patients. When one talks about arbitrary detentions, he generally means to accuse the private licensed houses where wealthy people are usually boarded. What are the actual legal guarantees in such houses? When a relative wishes a patient to be received, he must present a petition, a medical certificate, and a paper identifying the alleged insane patient. The superintendent has to send, within twenty-four hours of the reception, a certificate to the Prefect of Police in Paris, or to the Prefect of the Department in the other parts of France. He sends also a notice to the *Procureur de la République*. A medical inspector is directed to visit the alleged insane person. A fortnight after the reception the superintendent must send a new certificate. In Paris we receive as visitors: twice a year a medical inspector, every quarter of a year the *Substitut du Procureur de la République*, a magistrate delegated by the President of the Civil Tribunal of the Seine, and the *Juge de Paix*; on the whole, fourteen regular visits a year (I do not include Inspectors of hygiene and buildings). Besides, every time a patient sends to the Prefect of Police, or to the *Procureur de la République*, a petition protesting against his detention, a medical inspector is directed to visit him, and has to present a report of the case. If anyone presents a protest against the confinement of an alleged insane person, an inquiry is ordered. So I am convinced that individual liberty is amply guaranteed.

The provision of the new Bill transferring the powers of detention to judicial authority does not seem to secure an appreciable benefit to the alleged insane person. A judgment against anyone appears as a sentence. Besides, the magistrates, not having expert knowledge, would ground their decision on a medical investigation. Consequently, the new system might not be beneficial to anyone, excepting to the

superintendent of the asylum, who could oppose a judiciary sentence to the claims, and deny any responsibility for the detention of a patient, or at least assume a limited responsibility. But in such questions we must only keep in view the benefit of the patient, and not our own interest.

The expression *aliéné* is not generally taken in a good sense by the public, nor the terms previously used: *fou* and *insensé*. Nevertheless, such expression is most ancient, since it dates from Asclepiades, a good rhetorician turned a celebrated physician, who proclaimed, according to Cælius Aurelianus, that *alienatio est passio in sensibus*. Numerous among the relatives of the insane are those who will not admit that their patient is an *aliéné*, and they look quite satisfied if one answers that it is not the case, and that he is suffering from a psychosis. Such public repulsion with regard to the expression *aliéné* had induced the committee of the Senate to substitute the term, "patient suffering from an *affection mentale*." But one cannot please everybody.

It is said that Asclepiades used to prescribe drinking, and even inebriety, as a general treatment of insanity. Fortunately such a therapeutic measure is no more in vogue. An energetic struggle has been recently initiated against alcoholism, which fills the public asylums, and has proved to be a most powerful cause of mental and physical degeneration. Till now the distillers of alcohol and the tavern-keepers, who have great influence over political elections, had succeeded in opposing reform. So the Government, using the authority conceded by the state of siege, prohibited by a decree the sale of absinthe. But such a decree was good for the time of war only, and a law became necessary. A Bill prohibiting fabrication, sale, and export of absinthe has been voted by the Chamber of Deputies, and favourably considered by a committee of the Senate. Another Bill on the regulating and limitation of taverns is now being debated. Let us hope that, in spite of powerful and selfish opposition, alcoholism will be definitely mastered, and so the holy war will afford a complete deliverance.

Epitome of Current Literature.

1. Pathology of Insanity.

Functions and Structure of the Male Sexual Glands in Mental Diseases [*Ricerche sulla funzione e sulla struttura delle ghiandole sessuali maschili nelle malattie mentali*]. (*Rivista Sperimentale di Freniatria*. Jan., 1914.) Todde.

This elaborate article may be adequately presented to English readers if the conclusions arrived at by the author are given:

(1) The volume and weight of the testicles in the various forms of mental disease, compared with those of people who have died from accident or ordinary illness, are very often more or less diminished. Such diminution is constant, and is most marked in congenital mental deficiency.

(2) In the various groups of mental disease, independently of age,

the structure and function of the sexual organ appear much more frequently, and more seriously, altered than in the sane.

(a) The lesions which are most important, constant, and sufficiently distinct are met with in idiocy and imbecility. These lesions are characterised by complete arrest of the process of spermatogenesis, involving changes in the spermatiform and interstitial structures in the epididymis and seminiferous canals, and an augmentation of the inter-canalicular tissue. Not infrequently there is an absolute arrest of the evolution of the organ.

(b) In dementia præcox the functional disturbances and changes of structure affect more especially the seminal gland. The changes found are diverse. In some there is a quantitative alteration of the so-called "filial" cells, and consequently there is a simple diminution of function; in the majority of cases, however, there is a true cell degeneration with a complete absence of spermatozoa, or there may be an atrophy of the seminiferous canals with total or partial disappearance of the epithelial elements, accompanied by hyperplasia of the intertubular tissue.

(c) In paralytic dementers there is usually an arrest of function. This is accompanied by atrophy of the gland, with some inter-canalicular sclerosis. The epididymis also takes part in this change.

(d) In secondary or consecutive dementia there are prevalent signs of hypo-function of the testicles.

(e) In senile dementia, independently of the co-efficient of age, the function of the sexual gland is usually more or less diminished. Frequently function is completely abolished, and is then accompanied by atrophy of the organ.

(f) In those forms of insanity which owe their origin to alcohol, the function of the sexual gland is usually more or less at rest: though as a rule diminished, it is rarely altogether arrested. The more marked alterations are found in cases dying of hepatic cirrhosis.

(g) In pellagrous psychoses we find more marked signs of hypo-functionalisation, especially of the seminal gland. There are rarely serious structural phenomena, and when they exist they are generally in direct proportion to the duration and intensity of the psychosis.

(h) In maniacal-depressive cases occasionally the functional activity of the entire organ is completely, or almost completely, abolished. In the majority of cases a glandular atrophy is found.

Finally, the functional activity and structural lesions of the sexual glands in the insane have no connection either with age or with the cause of death. The alterations and lesions seem, on the contrary, to be in direct connection with the gravity and duration of the mental disease.

2. Clinical Psychiatry.

Paralysis from Phosphate of Creosote [Le Paralise da Fosfato Creosoto].
(*Revista Sperimentale di Freniatria*, March, 1914.) Bertolani.

Phosphate of creosote is used medicinally under the name of Fosoto in Germany. The case described was that of a man, æt. 28, who took the drug for chest trouble. In all forty granimes, at a rate of three

grammes a day, were taken. The medicine was then discontinued, and after ten days symptoms of polyneuritis began to develop. In the extremities subjective disturbances of sensibility were marked. These painful impressions were worse on movement or on pressure over the nerve trunks, but disappeared when the limbs were at rest. In from one to five days symptoms of loss of power made themselves manifest. In order of time the muscles of the leg were first affected, but the arms and hands were later involved, though not as severely as in the case of the lower extremities. Objective disturbances of the senses to touch, heat, and pain were slight, but followed the topographical distribution of the nerve trunks. These signs were followed by flaccidity of the muscles involved, which degenerated and to some extent atrophied. The skin became marbled in appearance, and desquamation took place.

The patient's condition improved at the end of four months, and a cure, though partial, was established at the end of a year.

COLIN McDOWALL.

3. Asylum Reports.

Some English County and Borough Asylums.

Cardiff City.—Dr. Goodall, as usual, furnishes particulars of the effect of alcohol as a factor in the ætiology of his direct admissions. Of the 105 cases analysed in which a history was given, fifty showed heredity of some kind, alone or with exciting (principal ?) cause. Of these, five had drink assigned as an exciting cause, and seventeen had alcoholic heredity. Among the fifty-five in which no heredity was ascertained alcohol was assigned as an exciting factor in sixteen. Assuming that the original assignment of ætiology was both exhaustive and accurate, some light is thrown on the comparative prevalence of alcohol as cause or symptom of insanity. In fifty cases with a taint of heredity alcohol appears as an exciting cause in five only, whereas, with no such taint, it appears in sixteen out of fifty-five.

The research work detailed naturally forms the most interesting part of the report, and we have no hesitation in exercising a liberal use of the scissors.

Investigations by Drs. Scholberg and Goodall.—Dr. Scholberg and I have carried out research in collaboration, of which the following is a brief account. Firstly, in respect to the Wassermann test; we communicated our results up to date with the method of complement-deviation at the recent International Congress of Medicine, London. Our main conclusions were as follows:

(1) We are unable to agree with those who state that with 0.2 c.c. (the usual amount) of amboceptor fluid, a positive Wassermann is obtained in practically 100 *per cent.* of cases of dementia paralytica. This may be true of cases in an early stage of the disease, or of those running a rapid course, although extremely little authentic information is available on the point. Our experience shows that in cases of long standing, such as those we worked with, and including several in which the disease was progressing very slowly, or in which states of partial remission or quiescence obtained, and in which only complete absence of hæmolysis was recorded as a positive result, no more than 56.4 *per cent.* of the cases gave a positive reaction in the serum, and 30.8 *per cent.* in the c.s.f. [Cases of retarded hæmolysis are very numerous, resp. 18 *per cent.* and 20.5 *per cent.*] [See observation at close.]

(2) The complement-binding substance is more active (stronger) in secondary

than in tertiary syphilis, and in tertiary syphilis than in general paralysis. (Wassermann—with 0.2 c.cm. amboceptor 1 in 10, respectively in 100 *per cent.*, 83.4 *per cent.*, and 58 *per cent.*)

(3) Conclusion No. 4 of our previous paper (which is the conclusion reached by the consensus of opinion), *vis.*: that a positive reaction in serum or c.s.f. occurs very rarely in cases of insanity other than dementia paralytica, if known cases of syphilis are excluded, and the test be repeated, is confirmed by these further observations.

(4) By increasing the amount of amboceptor used up to 0.6 c.cm., positive results in a series of cases of dementia paralytica were obtained in 36 *per cent.* in the serum, and 48.6 *per cent.* in the c.s.f., cases which gave negative or merely retarded results with 0.2 c.cm. If our table of positive results in dementia paralytica, composed of cases in which 0.2 c.cm. amboceptor was used, be corrected in the light of this information, the percentage of positive results is raised in the serum from 56.4 to 72, and in the c.s.f. from 30.8 to 64.5.

(5) The positive results in other mental disorders (Non-G.P.I.) were increased by taking 0.6 c.cm. amboceptor instead of 0.2 c.cm. in the serum and c.s.f., respectively, by 5 to 6 *per cent.* and 7 *per cent.*

(6) Conclusion No. 8 of our former paper is confirmed, *vis.*: that the reaction may vary in serum and c.s.f. at different periods of the disease in a given case without clinical change. A typical reaction also occurs in both fluids in pronounced and advanced cases.

(7) In some cases of general paralysis a positive Wassermann reaction is not obtained until between 0.2 and 0.1 c.cm. of pure cerebro-spinal fluid is taken. But 1 c.cm. is the amount required in some cases of cerebro-spinal lues, a point of resemblance between these conditions which bears out the difficulty, and even impossibility, of clinical diagnosis between them, and of histological differentiation in atypical or long-lasting cases.

(8) The reaction is often negative or incomplete in remission, but it may be positive.

The Nonne-Apelt reaction during remission is variable, and cannot be correlated with that state, but is oftener positive than is the Wassermann test.

(9) The Nonne-Apelt test is positive in a higher percentage of cases of known dementia paralytica than the Wassermann in the c.s.f. It is found more consistently throughout the disease than is the Wassermann. Wassermann is less frequently positive in non-general paralytics, hence rather more reliable in diagnosis.

(10) As regards the increase of cells in the cerebro-spinal fluid in dementia paralytica; as a test in actual cases of the disease, this seems about as constant and reliable as the protein test, and therefore is more frequently positive than the Wassermann; but, as a means of diagnosis, less dependable than either. No correlation was found between number of cells and severity of disease.

(11) There seems to be no need, or but occasional need, to perform the Wassermann test for the diagnosis of dementia paralytica. In psychiatric practice, a positive protein test, a positive nitrogen test (Stanford), and pleocytosis of the cerebro-spinal fluid constitute evidence of dementia paralytica. Exception need be made only for those cases in which the diagnosis has to be made from senile mania (G.P.I. sometimes occurs after 60 and undoubted cases have been described at even 70) and from cerebro-spinal lues. In the former Wassermann would be negative in all strengths of c.s.f., in the latter it would be negative usually with 0.2 c.cm. of 1 in 10. But it is frequently negative with this amount in dementia paralytica also.

Since the above results were communicated, Wassermann and Lange (*Berl. Klin. Woch.*, 16, March 16th, 1914) have shown that the lymphocytes are the source of the Wassermann reaction in the cerebro-spinal fluid, the centrifugalisation of this fluid in our cases, with the use of the supernatant fluid, will therefore, largely account for our low percentage of positive results. The importance of stating whether or not the fluid has been centrifuged is therefore enhanced.

The employment of thyroid gland in large doses (40 to 60 grains a day) in certain cases of an "anergic" type, speaking generally, has given satisfactory results, and I find that when the same substance, in the same large doses, is given to epileptics, who are kept supine during the treatment, but on their usual diet, the

fits are very greatly diminished in some instances. After the course, lasting some six weeks, the drug is continued in small daily doses, the patient being on ordinary diet and up and about; the fits have remained low in number. *Prima facie* this looks like an affair of the internal secretions, the drug supplied providing a want in the economy due to insufficient function or "dysfunction" of the gland in question. One is naturally led to hope that the like results may follow in other cases of epilepsy (or other forms of mental disturbance) when other glands, which produce internal secretions, are tried. But the whole subject of metabolism in the psychoses, in which the functions of these glands is comprised, is in urgent need of examination; hence my desire to see a physiologist, capable of undertaking experimental work in metabolism, appointed.

Thirteen epileptics were kept on the following diet for nine months: Breakfast—bread, 6 oz.; margarine, $\frac{1}{2}$ oz.; tea, 1 pint. Dinner—Potatoes, 12 oz.; milk, $\frac{1}{2}$ pint; cheese, 1 oz. Tea—as breakfast. On Sundays only was meat allowed, 7 oz. Salt on the table at dinner was replaced by 10 gr. of sodium-bromide dusted over the food. The bread was made without salt. This was all the bromide received; a very small amount for insane epileptics. None of these patients was upon drug-treatment prior to the issue of special diet.

The total number of fits upon this diet was 393, as against 686 on the ordinary diet of the Hospital. The same treatment is being continued in a large number of these cases.

Dr. Stanford, research chemist, reports as follows: The past year has been devoted chiefly to the study of the cerebro-spinal fluid in the insane from the quantitative point of view. The considerations which led me to turn attention to this problem were referred to in last year's Report. The preliminary experiments there mentioned, yielded such interesting results, that I resolved to attempt to work out a complete quantitative chemical analysis of cerebro-spinal fluid. It must be emphasised that any such quantitative scheme is of practical utility only if it can be applied to a quantity of cerebro-spinal fluid obtainable from the living subject. Since, however, the amount of fluid so accessible is of the order of five to ten cubic centimetres, and since the fluid is a very dilute solution it is evident that the quantitative methods employed will have to be capable of estimating very minute amounts of the substances sought for, and of doing this also with a sufficient and *known* degree of accuracy. In practice, methods are required for estimating quantities which are to be reckoned in hundredths of a milligram, with an experimental error of about 1 *per cent.* Analytical methods of this kind are not known at present, so that it has been necessary to devise suitable methods and test their accuracy before the actual estimations could be proceeded with.

Certain such methods I have already worked out and applied in a very large number of cases of mental disease; other micro-quantitative analyses are projected, but at present the requisite new methods are not quite perfected. Those which have already been extensively used include measurements of density, viscosity, and estimation of the total nitrogen of the fluid.

From accurate measurements of the densities of a large number of cerebro-spinal fluids, taken during life, it was found that, as a general rule, the density in all cases other than those of general paralysis fell below a certain limit, whilst in general paralysis the density was always above that limit. The diagnostic value of this difference is obvious, but it is somewhat impaired by the occasional occurrence of high densities in cases not of general paralysis. I published a detailed account of this work during the year (*Zeitschrift für physiologische Chemie*, 1913, 86, 43).

The viscosities of cerebro-spinal fluids in different mental diseases differ but very slightly, so that the hope of tracing abnormal constituents by this means was not realised.

The total amount of nitrogen contained in one cubic centimetre of cerebro-spinal fluid varies from fifteen to twenty hundredths of a milligram in healthy persons and in insane patients not suffering from general paralysis, whilst in cases of general paralysis the "nitrogen number" (number of hundredths of a milligram of total nitrogen in one cubic centimetre of fluid) is much greater than this, ranging from twenty to forty in most cases, and reaching even eighty or ninety as death approaches. The new method by which the estimation of the nitrogen number is performed, and an account of the results obtained by means of it, I

published during the year (*Zeitschrift für physiologische Chemie*, 1914, 86, 219). Since that publication a large number of other cases has been examined, with results entirely confirmatory of those recorded in the paper, so that it may fairly be claimed that this, the first quantitative chemical method for diagnosis in insanity, has a real diagnostic value, and it is now in use in this hospital for this purpose. The differentiation of cases of ordinary mania from cases of general paralysis showing maniacal symptoms is specially marked.

As a deduction from results obtained in this nitrogen estimation, I have recently been able to devise an extremely simple and rapid test for the most important of the nitrogenous constituents of cerebro-spinal fluid, which appear almost solely in general paralysis. The test, of which an account will be published shortly, can probably be made the basis of a method for the micro-quantitative estimation of these constituents.

By methods similar to those already mentioned in this Report, it has been proved that *fresh* cerebro-spinal fluid contains practically no ammonia (less than one hundredth of a milligram per cubic centimetre), even in general paralysis cerebro-spinal fluid probably contains also no phosphorus.

In enlarging on the gratifying results of the Conference of Asylum Authorities, which was due, we believe, mostly to the initiative of Cardiff, Dr. Goodall issues a note of warning against the placing of any portion of the grant now made for research in the hands of any but the most competent worker. Chance connection with a mental hospital should not be considered to be a qualification. We venture to think, too, that grants should be chiefly given where there already exists sufficient machinery for carrying on research work.

Both the Committee and Dr. Goodall refer, with grateful appreciation, to the honour done to the Hospital by the special visit of the Home Secretary, in whom much interest was aroused by what he saw. This visit, besides being gratifying to Cardiff, must prove to be of value to psychiatry in general. It will be remembered that Mr. McKenna exerted all his power to pass the Mental Deficiency Act through Parliament in the face of most strenuous opposition. His interest was intense, not only in getting the Bill through, but in passing such an Act as would do much good to the object sought. Having thus acquired an interested knowledge, he may be looked to to further many of the questions which call for serious attention. It surely is a great gain to have a friend of our work inside the Cabinet, who can possibly persuade the Chancellor to open his hand further than he has already done in making the annual grant of £1,500 for research. Another honour in the year consisted in the choice of Cardiff by the International Congress for a visit. Appreciative accounts were published in French and German medical papers. In congratulating the Committee and Dr. Goodall on these events, we feel bound to say that the honour is thoroughly deserved. Psychiatric progress, both in medical and lay hands, is persistent and most strenuous.

Cumberland and Westmorland Asylum.—Much thought is given to reduce the cost of maintenance, and a table recording the annual cost of a patient to the ratepayers is given, commencing from 1862. In that year it was 11s. ; the present year it is 9s. 1d. The cost of provisions has gradually, year by year, fallen, until now it is 2s. 11d., while the salaries have irregularly risen to their present maximum of 2s. 9d. At the same time we note that the salary of the Senior Assistant

Medical Officer is, after eight years' service, only £225. Nurses commence at £19.

Dr. Farquharson, in his remarks, says :

"Beyond one case of colitis in the early part of the year, which terminated fatally, there has been no epidemic or zymotic disease amongst the patients. During the greater part of the year the infirmary wards, male and female, have been filled with cases bedridden from age or disease. The open-air treatment of these cases on the verandahs appears to have a remarkable effect in prolonging life, many of them show little sign of vitality, yet they survive in a wonderful way. At the end of the year there were in all eighty-three patients being treated in bed, but this number also includes recent cases of mental disease, for whom the open-air treatment in bed is equally beneficial. General paralysis of the insane is not as common in these counties as in many other parts of England, but last year there was an unusually large number of patients admitted suffering from this disease. At the end of the year there were in residence fifty-two patients over seventy years of age. Apart from the aged and bedridden cases, the general health of the asylum population has been good throughout the year."

We note the complete absence of Table D. This is not the only annual report in which this want is noticeable, and we regret the fact, as of all tables we think that this one is, perhaps, the most useful scientifically, especially so in this asylum, where this year every patient who died was the subject of a *post-mortem* examination.

Derby Mental Hospital.—Dr. McPhail says :

"The admissions included six epileptics, six congenital imbeciles, seven general paralytics, and five cases of senility. In addition, ten others have been of unsound mind for over a year, and were therefore practically incurable and unlikely to benefit by treatment. Thus, in at least 44 *per cent.* of the whole there was from the first practically no prospect of recovery. There were fewer of the adolescent class than usual among the admissions. A noteworthy feature was that recent cases of a maniacal type and of a melancholic type came to exactly the same figure, while an equal number of recoveries was obtained from exalted mental types as from cases of mental depression.

"There is little fresh to record or comment upon with regard to causation. The *Ætiological Table* (7) has been compiled as accurately as possible, taking into account the difficulty of obtaining reliable information about the receptions. Dealing as we do with a limited and comparatively small area, we have the advantage of knowing something about the relatives of many of the patients admitted. For example, in the last twenty-five years I have twice had four generations of patients under my care. But, until we are able to have detailed investigation by a competent medical authority into the possible hereditary, acquired, and environmental causes of the insanity in each case admitted, we shall always have difficulty in obtaining verified facts regarding the early stages of mental disease, which might suggest measures of prevention."

Dorset County Asylum.—Dr. McDonald, in his remarks on the *ætiological* causes operating during the year, says :

"Among the various causes as tabulated in several of the statistical tables there does not appear to be any lessening of the widespread consequences of a predisposition to mental or nervous diseases. In quite a number of the cases admitted during 1913 not only had there been instances of mental trouble in the family stock, but the history showed associated factors such as epilepsy, tubercle, and other equally potent complications. The simple, uncomplicated case is encouraging and hopeful, but when you recognise the epileptic parent visiting the congenital epileptic son or daughter, or the mother, who had formerly been a patient here, visiting her eldest daughter, a bright, healthy-looking girl, the subject of adolescent mania, then, indeed, are the results and ravages of a tainted stock made manifest

beyond dispute. The idea that in a general way more discrimination is being exercised is not borne out by the facts at one's command. More often than not the future is disregarded, if not absolutely ignored, and the truth of this is only known when such painful examples as just mentioned are brought to light."

We would congratulate the County in having a record of only two males whose insanity was chiefly due to excess of drinking, and one woman for whose mental breakdown a similar cause was partially accountable.

Glamorgan County Asylum.—We note the following remarks by the Medical Superintendent, Dr. Finlay, on the nursing examinations :

"For the Medico-Psychological Nursing Examinations twenty-eight candidates entered, eight being attendants and twenty nurses. Of the former, five were junior and three senior, and all were successful, two of the seniors passing with distinction ; of the latter fifteen were junior of whom six passed, and five senior of whom two passed. Considering the high standard of efficiency now required by the examiners the comparatively large number of failures among the nurses is not altogether surprising, and, as was pointed out last year, a very considerable proportion of the resignations can be attributed thereto."

We are sorry to think that the old adage of "Try, try again" is losing its force in Wales, but we congratulate the two attendants who passed with distinction. At the same time, we think it a pity that the nursing examination should be blamed as a means of driving women from an occupation. The average of 40 *per cent.* (2 out of 5) surely is not a very unsatisfactory pass list. In another Welsh asylum, which shall be nameless, for the same preliminary examination, three men sat and one came down, nine women entered and seven were successful. From what we know of the Welsh people we should never judge them to be dull, or, as is suggested, of lacking in pluck.

Hertfordshire County Asylum.—Several interesting details are to be noticed during the past year. Buildings are in course of erection for the accommodation of a hundred female patients. The plans have been approved for an attached block, the ground floor of which is designed as an infirmary. In addition, a nurses' home is to be built. The total cost, excluding £2,000 for furnishing, will be £18,240. The Committee have also bought ninety-seven acres of land, and have decided to buy a further forty-one acres. Nor is this all, for at a cost of £2,000 eight attendants' cottages are to be built. A case of pellagra occurred in a female patient who recovered.

Such a report, full of enterprise and advance, is, however, marred by a very unfortunate event. A female patient who was visited by her husband was in the habit of asking to be killed, and the husband carried this wish out in the asylum visiting room by shooting her with a revolver. The patient died and the man immediately afterwards fatally shot himself. It is wonderful how rare such occurrences are, and this tragedy will accentuate the ease with which such a deed may be accomplished.

Lancashire, Prestwich.—The Visiting Committee reports that in the case of Mr. Redman, the late clerk and steward, the Home Secretary

was good enough to allow three years to be added to the thirty-one years of service, in order that the Committee could grant full superannuation. The retirement was caused by ill-health.

The new infirmary for 100 female patients has cost £16,750, to which may be added £1,460 for furnishing and £600 for clothing, so that the total works out at about £188 per bed complete. This is not an extravagant one in view of the requirements of construction and fittings. The Committee desire to provide separate accommodation for private patients, but the Commissioners refuse consent.

It is noteworthy that three out of the ninety-nine female deaths resulted from pellagra.

The Commissioners, in their report, note that while all the wards are duly supplied with writing-paper, there is absolute lack of envelopes, the patients having to put their names at the foot of the manuscript. This, they remark, makes them doubt whether the provisions of Section 41 of the Act can be properly carried out. This is an obviously appropriate criticism to which we, with deference, would add the general criticism that the free offer of paper, whether with or without envelopes, is highly dangerous to acute cases. We must all have seen cases suffer from acute confusion, followed by grave exhaustion, when their jangling intellects are taxed by futile efforts to co-ordinate thought. The liberty to complain or to plead with the higher authorities in secret is one thing; the liberty to undertake mischievous brain-struggle is quite another. A patient should not be permitted to tax his diseased brain any more than a patient with pneumonia should be permitted to join in a game of football. This is in reality a question of medicine, and not one of legal ordinance.

Leicester Borough Mental Hospital.—Dr. Dixon has had for two years a systematic treatment adopted in relation to the reduction of epileptic fits. This year the total fits in ninety-five patients was 5,216, a diminution of 56 *per cent.* from the average of the last five years. He remarks that not only have the number of fits reduced, but what is of still more importance, the mental and physical state of the patients improved. New spray baths have been introduced and the patients seem well pleased with them. We are not told if female patients have the system of bathing or not, or if in addition an ordinary bath is taken once or oftener weekly. It is noteworthy that as much as £5 is now given to attendants and nurses who hold the medico-psychological certificate. This example of increased remuneration is worthy of the attention of other asylums, where in some cases nothing additional is given, and in others a pound only. The matron, after forty years' service, retires upon what must be a very well earned pension. In every instance of death a *post-mortem* examination was held, but we find in Table D no entries of correlative causes.

London County.—The report of the Visiting Committee commences, as usual, with a statement of the numbers of patients for whom the Committee is responsible, the number of those actually under care, and the amount of accommodation at disposal. On the whole the alleged increase of insanity is rather disproved than supported, the rate of

increase in population in asylums having tended downwards, with occasional exceptions, for some years past. And the exceptions are not such as to suggest anything more than that a few more cases have ripened in one year and a few less in the next. The Metropolitan Asylums Board, the "Workhouse," and "Friends" vary but little in the numbers whom they have in charge from year to year. The total and direct admissions show the same downward tendency, but, curiously, the applications for beds were a little heavier than usual. With regard to these applications, we have in former notes drawn attention to a certain periodicity—that is to say, the more or less marked excess in the spring months, with a relative falling off in the autumn and winter. Last year the spring quarter had the fewest applications, while January had the greatest number of any month.

The tables now presented by the Committee are likely to be the last that will show the normal workings of the system for some time to come. Not only will this normal be temporarily disturbed by the contemplated provision of beds in asylums for the wounded coming back from the Continent, but the direct and indirect influence of the war on the population at large, on the staff, and on the general machinery dealing with rate-paid insanity, must tend to new stresses all round, which will vitiate averages for the time being. It is, perhaps, something to be able to think that the system, especially in London, is sufficiently developed and organised to withstand all demands upon it.

The Committee again complains of the extreme difficulty in arranging reception contracts with other authorities, especially in view of the stringent requirements as to the character of cases to be transferred. The eleventh asylum is well on its way, but will not be finished till November, 1916, and then only if labour disturbances do not again intervene. The duration of the war, and the eventual setting of great quantities of labour at liberty, will have an important bearing in this connection.

The Committee has rented a large house at Manningtree for fifty male patients, and it will be administered as an annexe to Colney Hatch. Beyond giving so much needful accommodation, the house may, we hope, demonstrate the high value of an outlet for improving or convalescent patients. It is somewhat remarkable that more advantage has not been taken of Sect. 261 of the Lunacy Act under which this arrangement has been made. In this instance a very moderate rent (£130 per annum), and a trifle of £800 for adaptation, show that economic considerations have no great weight against the idea.

Aliens continue to be vigorously dealt with, and the year's deportation shows the usual variety in nationality. The cost is borne by the local authorities altogether up to £15, and when above that amount is shared by the authority and the Government. One Colonial has been repatriated in the Falkland Islands, at the cost of the latter.

A sum of £47,000 is proposed to be expended in remodelling Banstead, in order to fit it for the appropriate treatment of all sorts of cases, it having originally been built for chronics only, with huge wards.

The superannuation cost amounted to £6,000, while the contributions under the Act were £8,200.

The Committee has had to face the difficulty of procuring sufficient suitable officers. The remuneration of the assistant medical officers has been revised, while an extra denomination of attendant has been instituted under the term "special charge." This promotion is accorded to those in charge of infirmary or difficult wards, the second nurse in these wards ranking as first class.

Attendance at instruction classes is obligatory on probationers. More provision is made for attendants with five years' service to marry and live outside the asylum, with an allowance in lieu of lodging and washing, with the proviso that they shall sleep in the asylum for stated periods.

The Committee some time back applied for exemption, under Part II of the National Insurance Act, for their tradesmen, on account of the practically permanent position of the tradesmen. The Board would not agree to this unless the Committee would consent to their not being dismissed except for misconduct, neglect, or unfitness. The Committee not being able to give this consent, we suppose for reasons not unconnected with trade unions, the proposal fell to the ground. However, fifteen months later the Board reconsidered its view, and the order of exemption was granted.

The Committee having been appointed by the Council to be the committee under the Mental Deficiency Act, a new body is created, and this will be the last report of the Visiting Committee. It takes the opportunity of reviewing shortly its work since 1889, the year of its birth. The salient points are : Its patients have increased by 110 *per cent.*, its staff by nearly 400 *per cent.*, while expenditure on maintenance has increased from £180,000 to £617,000 per annum. Let us compare these figures with those of a very similar district abroad—the Seine Department in France, which will be found on page 117 of the *Journal of Mental Science* of last January. These are supplied by Dr. Toulouse, Medical Superintendent of the Ville-Juif Asylum, an ardent reformer. In the ten years ending in 1913 (as against the twenty-four years covered by the L.C.C. Visiting Committee), Dr. Toulouse found an increase of 13 *per cent.* in the population, and 45 *per cent.* in cost. The yearly cost of each patient is £44, this probably including allowance for interest, etc., on capital expenditure, as well as maintenance. In that case the latter would be about equal to that of London. Dr. Toulouse says that the increase in cost has been almost wholly absorbed by augmentation in staff, and improvement in their wages. But he complains bitterly of the poor provision for the comfort and treatment of the patient, poor heating and lighting, high walls in place of proper exercising grounds, etc., no machinery for scientific inquiry, and so on. We can say, then, that the London authority has gone much farther than Paris in bettering the lot of its insane. We should doubt whether any country, or part of a country, can show a better record than London County Council. There may be countries in which claim is made of superior "kultur" in regrouping and renaming clinical symptoms, complexes, and pathological conditions, but in the true "kultur" of making the best endeavour to lead patients to recovery, or to take humane and enlightened care of them if recovery is denied, we may feel that we are second to none. In establishing happy con-

ditions for the insane, the London Asylum Committee has had a large share, and should have much congratulation offered to it.

At *Banstead* confusion was the type of insanity that was found to be most prevalent among the admissions. This type is of comparatively recent manufacture ; but it is of growing importance, and forms nearly 8 *per cent.* of the London direct admissions, and nearly 4 *per cent.* for all England, and it has a very fair recovery ratio. Among the discharges is one that may be noted. A man had thrown himself from a railway carriage while under arrest. Having received some slight injuries to the head, he cleverly feigned insanity, but with no success. After a short period of observation, he was discharged as not insane, and got his term of imprisonment after all his trouble and risk. One man made his escape by manufacturing a pass key. He was a crafty imbecile and ex-criminal, so no doubt he had taken his degree in burglary before admission, and he was crafty enough to avoid arrest within the statutory time.

At *Bexley* alcohol entered into the ætiology of no less than 42 *per cent.* of the total first attack cases, in 30 *per cent.* as a principal factor. Correlations occurred in these in the following numbers : With heredity, 17 instances ; alcoholic heredity, 10 ; congenital defect, 15 ; syphilis, 30. In relation to salvarsan, Dr. Stansfield has found no benefit from it. On the other hand, the course of those cases in which it has been tried has been more rapid, a striking number of these developing ataxic symptoms. He is of the opinion that compulsory notification should be adopted in relation to syphilis. He expresses his deep gratitude to the British Women's Temperance Association for visiting discharged alcoholic patients. There are 140 male patients who have complete parole of the estate, and not one has abused the privilege in any way. Dr. Stansfield suggests that a good deal of dysentery in asylums may be attributed to the careless and insanitary habits of the workmen engaged in building.

At *Claybury* Dr. Armstrong-Jones states that one quarter of his admissions were said to be strongly suicidal, and many serious attempts were made, without any success however. He notes that a female telephone operator referred her aural hallucinations to the constant strain imposed by her work with messages.

At *Colney Hatch*, where Jewish patients are usually cared for, Dr. Gilfillan gives some interesting particulars concerning them. They numbered 487 ; 38 males and 59 females were admitted, the inter-sex ratio being about the same as that of the general body of admissions. Of the 59 females, 44 were suffering from various forms of emotional disturbance ; the same being found in 16 of the 38 males ; 6 males and no female suffered from general paralysis. About 7 *per cent.* were epileptics. Of the 46 deaths due to tuberculosis, 18, or 39·13 *per cent.*, were in Jewish patients. The Jews, however, formed only one-fifth of the population. This proportion of tubercular deaths among Jews has been on the average, for seven years, 29·29 *per cent.*

It is grievous to learn that in an institution where farming operations receive so much earnest attention swine fever reappeared, and led to the slaughter of the entire stock of 369 pigs.

At *Hanwell* Dr. Bailey reports an experiment of allowing nurses who

have friends in the neighbourhood to sleep out. This was successful and much appreciated. In a case of puerperal insanity with obvious signs of septic absorption, Dr. Daniel treated it with a vaccine which he prepared from cultures obtained from uterine discharges. The results were very encouraging, a rapid recovery taking place. Treatment of general paralysis by intra-theal administration of aqueous solution of neo-salvarsan is being experimented with by Dr. Reade, who will publish his results. In connection with the newer treatment of this disease, Dr. Bailey, in the following remarks, supplies a very useful cold douche to the false hopes that are from time to time exploited by the lay press :

In this connection it seems advisable to utter a word of warning, that too much may not be expected of the new vista which this method of treatment of general paralysis seems to open up. The pathological process is a slow and insidious one, and must have advanced to a considerable degree before it reveals itself by any clinical manifestations. Even in the earliest cases, therefore, which came under observation, the nervous elements must already have suffered extensive damage, but the neuron which has once been damaged by the syphilitic virus can never be restored, and it seems probable, therefore, that the best that can be hoped for is an arrest of the process, and a consequent prolongation of the patient's life, probably on a lowered plane of mental activity and intelligence. It must be remembered, however, that even if the best results that can be expected are obtained, the evil is only being dealt with at its periphery, and there yet remains to be propounded a remedy which shall attack its root and origin. Moreover, there still remain a large number of cases of mental disease in which syphilis is the main, perhaps the only, causal factor, but in which the symptoms arise not because the nerve elements themselves are attacked by the virus, but because these are starved and undergo consequent necrosis owing to defects in the cerebral circulation, which are the result of syphilitic endovasculitis. It is not suggested, nor is it to be expected, that any benefit can be obtained by anti-syphilitic remedies in these cases.

Hanwell, like Colney Hatch, has suffered from swine-fever. The Board of Agriculture has been carrying out experiments in the treatment of the herd by means of serum injections.

At *Horton*, Dr. Lord has to lament the hopeless nature of the admissions; of the 184 men not less than 94 being recognised as quite incurable, many doomed not to see the year out. He expresses his wonder how some cases manage to keep out of the asylum as long as they do. Forty of his admissions had presented symptoms of insanity for periods from three to fifteen years. Apart from increasing physical infirmities, he sees increasing adverse variation in the mental characteristic. It is becoming more and more difficult to conscientiously classify cases as being of the mania or melancholia types. In valuing the factors of a case the difficulty is to limit the numbers of them involved. Heredity is the most potent, being found in *74 per cent.* Thirty-four men and six women had criminal histories, only four coming from State prisons or asylums. The bulk come from Poor Law institutions. Alcohol was assigned in *36 per cent.*, and positive evidence of syphilis was found in *18 per cent.* As Dr. Lord points out, the exact value to be given to the term "recovery" is very ill-determined, and always will be, as it is in general medicine. It all depends on whether we are considering an attack or the disease itself. We may suggest that many a man recovers from a serious attack of gout or rheumatic fever, but few, if

any, get rid of the diathesis which is at the root of the attack. If we really wish only to record those who get well of one attack and present but little probability of another, a better test does not exist than that of Dr. Whitwell evolved in one of his reports a few years back. And the decision in any given case has, we think, certain risks for the superintendent. If a patient is discharged recovered all his legal responsibility and capacity is restored to him, and, to a certain extent, any future actions on his part involve responsibility on those who thus discharge him, unless a reasonable interval has elapsed. On the other hand, if a patient is discharged relieved and does wrong, a superintendent is open to the disagreeable insinuation of bad judgment. One can only take the chances of avoiding both Scylla and Charybdis.

At the *Colony*, Dr. Collins gives some interesting statistics which throw some light on direct heredity of epilepsy. Nineteen *per cent.* of the male patients, and 17 *per cent.* of the females were married. In ten cases the marriage was sterile, but as a result of the other marriages 178 children were alive. Of these five were, at the time of writing, epileptic, but ten patients had children who died from convulsions. In 66 *per cent.* of the married cases epilepsy commenced after twenty-five years of age, and these cannot be classed as cases of ordinary idiopathic epilepsy. Dr. Collins considers that these considerations show that other causes than heredity of epilepsy have to be looked for, and he finds that parental alcoholism and neuropathic stock are frequently present. In two cases syphilis was demonstrated by the Wassermann test, who, being appropriately treated, were discharged. He refers to good results following the use of the Dragées Géligneau. These have frequently beneficial results in epilepsy, especially of the Jacksonian type, but they, unfortunately, are very expensive. They deserve to be better known.

The Pathologists' report is, of course, from our psychiatric point of view, one of the most important features of the volume. In it Dr. Mott, *inter alia*, puts the case of the general paralytic from his own observations so succinctly, cogently, and lucidly, that we feel justified in transferring the whole into these columns. Not a sentence can be omitted.

The Investigation of the Causes of Insanity.

We cannot hope to prevent or cure insanity or feeble-mindedness until we know the causes underlying the diseases of the mind and mental deficiency. The history of the progress of medical science demonstrates the fact that physiological experiment combined with the application of the biological, physical, and chemical sciences to the study of the causes of disease have led to discoveries by means of which prevention and successful treatment have resulted. When I was appointed pathologist to the London County asylums syphilis as a cause of mental disease was not mentioned in the reports. My hospital experience had taught me that it was by far the most important cause of organic disease of the nervous system; and this led me to make researches in this subject in respect to asylum patients. In a few years, by dint of constant researches, especially by the study of numbers of cases of the juvenile form of general paralysis of the insane in the subjects of congenital syphilis, I came to the conclusion that syphilis is the essential cause of this terrible malady, and that if there were no syphilis there could be no general paralysis or tabes. The discovery of the specific organism by Schaudinn, the experimental inoculation of animals, the introduction of the Wassermann reaction of the blood and cerebro-spinal fluid, and lastly the introduction by Ehrlich of a new method of treatment of syphilis by salvarsan, have led to a widespread feeling that this racial affliction can be combated. It is only within the last year that the

last link in the chain of evidence which associated general paralysis and locomotor ataxy with syphilitic infection has been definitely forged. It has been shown that in almost every case of general paralysis the cerebro-spinal fluid gives a positive Wassermann reaction, and 75 *per cent.* of the cases of tabes. The other 25 *per cent.* in which it is not present is not a proof that it never had been present. The discrepancy in the percentages between the two diseases can be explained by the fact that tabes is a very slow process of destruction, and, for reasons which I need not go into here, the poison of the spirochætal activity may not necessarily be formed in the nervous system. Since, however, the discovery of Noguchi and Moore of spirochætes in twelve out of seventy brains of general paralytics, confirmed by myself and many other observers, any doubt as to syphilis being the essential cause has been dispelled.

Personal Observations on the Brains of General Paralysis.

In a series of a hundred brains of persons dying of this disease, I have found the spirochæte in sixty-six, in some cases more numerous than in the primary sore. According to my experience they are more numerous and found with greater ease in cases dying soon after admission. They exist in scattered foci all over the grey matter of the cortex, but especially can they be found in those regions where the earliest signs of adhesions of the membranes occur, namely, the frontal lobes. The colonies are perhaps not more than a millimetre to a few millimetres in size, and when they exist the grey matter has a softer consistence and a pinkish appearance. Microscopically, there is more evidence in the neighbourhood of the spirochætal colonies of inflammatory reaction, and one sees the perivascular sheaths filled with lymphocytes and plasma cells. Sometimes the spirochætes may be found surrounding the perivascular spaces in great numbers. It is very easy to demonstrate the presence of the spirochætes by taking a little of the grey matter, rubbing it up in a mortar with salt solution, and examining the emulsion with the dark ground microscope. If the preparation is made from a brain obtained soon after death, the organisms can be seen moving. They differ in no way morphologically from the spirochætes obtained from the primary sore or from a congenital syphilitic organ. By Neisser Pollak puncture method Förster and Tomaszewski have obtained living spirochætes in the small cylinder of brain removed during life in 40 *per cent.* of sixty cases. If we had time to search, there is no doubt spirochætes could be found in every case; for we know that the fluid in practically every case of general paralysis gives a positive Wassermann reaction. There is reason to believe that the spirochæte enters the central nervous system when generalisation takes place in the secondary period, and it remains latent for a number of years, it then takes on active multiplication with production of toxins, resulting in an inflammation of the brain with mental and motor phenomena of irritation. But this inflammatory condition is accompanied by a destruction of the nervous elements (cells and fibres) and a degree of dementia proportional to their destruction. We know that then the patient may remain more or less demented a number of years until a recurrence takes place, due no doubt to a fresh development of the parasites, or he may die from some intercurrent disease. Sometimes, however, after an attack of acute mental and motor irritation phenomena (mania or seizures) or a loss of consciousness, the patient makes an apparent recovery (without any specific treatment), and is discharged from the asylum, only to return again on account of a recurrence of symptoms. We must suppose that Nature itself has arrested the multiplication of the specific organisms by the production of spirillicidal substances. What, then, has caused the recurrence? Either the organism has changed into a resistive spore (extra or intracellular stage), or the explanation of Ehrlich may be the correct one, *vis.*, some few of the spirochætes (syphilitic organisms) are resistive to that particular antibody and remain undestroyed, awaiting a favourable moment of a lowered resistance of the tissues to start multiplying. If these cases had been treated by any of the numerous methods of intravenous or intrathecal injections of salvarsan they could have been claimed as therapeutic cures. Candidly, I do not think any great success has attended any of the methods of treatment so far employed. We must rather look to the prevention of the spread of syphilis and its early diagnosis and treatment by modern methods as the most helpful way of combating this terrible malady. Of the total admissions to the asylums of the County of London every year about

10 *per cent.* are general paralytics; more than 15 *per cent.* of the male admissions are general paralytics, and these are recruited from men of all social grades, who, prior to the onset of the disease, for the most part, were efficient and productive social units of civic worth and capacity. True, the females are largely recruited from the unfortunate class of women, many of whom are mental defectives, but many have been driven to prostitution by seduction, desertion, and destitution, but a good many are the innocent wives of men by whom they have been infected, and who are unaware of the real cause of the disease. Moreover, the histories of the families of paralytics show that not infrequently they have transmitted syphilis to their offspring. Incidentally, I may remark of the sixty juvenile paralytics I have collected, in 20 *per cent.* one of the parents, usually the father, was a paralytic. The inquiry I have made regarding the incidence of general paralysis in the two sexes in London parishes shows that the females are relatively more numerous in the poorer East-end parishes, and that there is a correlation between female paralysis and degraded poverty. Now, it is interesting to note that the higher you rise in the social scale the less often do you meet with general paralysis in the female sex. This is not the case with the male sex, for it is pretty equally distributed in all grades of society. In the juvenile form, where the chances of syphilitic infection are equal, the sexes are equally affected. The incidence of general paralysis, therefore, in a population, may be looked upon as a measure of the incidence of syphilis.

In connection with the different class of female to male affected by this disease and the large number of prostitutes who die of general paralysis, I may mention that these facts may be correlated with observations I made some years ago on the convolutional pattern of the brain of male and female paralytics; for I was struck by the fact that, as a rule, the male paralytic possessed a well convoluted brain of above the average, whereas the female paralytic possessed very frequently a small brain of simple convolutional pattern, indicative of an imbecile.

If it were not for the fact that there is no accumulation of general paralytics in the asylums, as the death-rate equals the admission-rate, the cost of maintenance from this disease alone would be enormous. But it must be remembered that many cases of organic dementia, imbecility, idiocy, epilepsy, and brain-softening are due to syphilis. Moreover, it is the most potent cause of nervous disease, *e.g.*, tabes is always syphilitic. Hemiplegia, paraplegia, and likewise aphasia are very frequently due to syphilis, and the sufferers with these diseases do not die in a short time, as is the case in general paralysis, but have to be maintained for numbers of years in asylums, infirmaries, and institutes for incurables. Numbers of other incapacitating diseases due to syphilis might be mentioned, *e.g.*, aneurysm and aortic disease. As an asset to the nation, the value of each individual depends upon the amount of physical and mental work he or she can produce, and the capacity for breeding and rearing healthy children. Now, venereal disease, especially syphilis, although in the majority of instances by direct effect does not prevent a man or woman working by making them bedridden, nevertheless by direct or indirect effects on the vital organs diminishes considerably the efficiency and length of productive usefulness of the individual, and in at least 15 *per cent.* of persons affected by syphilis causes, when no treatment or insufficient treatment is adopted, fatal incapacitating diseases which render the individual prior to death a monetary burden to the State for a number of years, not to mention the great infant mortality, and mental and physical disabilities in the offspring that survive. From an economic and productive point of view, the State and municipal authorities could save in the end enormous sums of money by a wise expenditure in preventing the spread of this disease, and by promoting cure in the early stages, thereby preventing generalisation in the blood- and lymph-streams, and infection of the central nervous system. When we examine the brain of a general paralytic dement, or a senile dement, or a case of organic dementia from cerebral softening, both naked eye and microscopic evidence show a destruction of the cerebral cortex, the anatomical substratum of the higher functions of the organ of mind, and proportional to the dementia is the decay and destruction of the nerve-cells and fibres. Likewise in idiocy and low grades of imbecility we find a simple convolutional pattern, which means a less extensive area of the cerebral cortex; moreover, microscopic examination shows a failure of development of cells and fibres, due in the majority of cases to an inborn germinal deficiency. The dement, whether a paralytic or senile dement, is an individual who

was born rich, but is now poor in the anatomical basis of mind; whereas the idiot and low-grade imbecile was born poor in the material basis of mind and could never be other than destitute. For I may remind you that at birth the convolutional pattern peculiar to the individual is present, and all the neurones which are to grow and develop and become the storehouse of memory of experiences are there. And in the *Archives*, vol. vi, Dr. Edgar Schuster has demonstrated the very interesting fact that just as there is a similarity in the bodily formation and physiognomy of relatives, so there is a similarity in the folds and fissures forming the convolutional pattern of the brain—the organ of mind.

Dr. Mott furnishes statistics of the occurrence of parental insanity in cases of juvenile deficiency, from which he deduces that direct heredity is not so potent a factor as may be generally thought. He finds only a percentage of 2·1 of insane parents with mentally defective children. This proportion is confirmed by an independent inquiry carried out by Miss Agnes Kelly. He points out that among the defective children a considerable, but as yet unascertained, percentage owe their deficiency not to germinal hereditary defect, but to congenital, pre-natal, or post-natal causes. But the fact of the large number of grandparents affected supports Morell's doctrine on the intensification of mental deficiency in successive generations, which is again supported by his own doctrine of anticipation, or antedating, described in former reports.

In further remarks on degeneracy, Dr. Mott adverts to the fertility of higher-grade imbeciles. Attention is arrested by the fact, related later, that Dr. Laura Forster, who has completed an examination by serial sections of the ovaries in 100 cases of women suffering from various forms of insanity who have died in the asylums during the child-bearing period of life, has come to the conclusion that where there is disease of the brain, or some form of mental incapacity associated with it, the power of the individual to reproduce her kind, if not absolutely cut off, is at least generally diminished to a greater or less extent. Certainly in a great number of cases there are evidences of an early involution of the ovaries and cessation of function. This was particularly shown in cases of dementia præcox, where the ovaries of all those who had reached the age of thirty revealed signs of early involution, marked by an increase of interstitial connective tissue, and a great scarcity of Graafian follicles.

The correlation of these two statements, supported in Dr. Mott's case by obvious fact, and in Dr. Forster's by unimpeachable scientific observation, would appear to reverse the hitherto accepted theory that the greater tendency to effacement of race is found in the lower depths of mental degradation. The interests of biology call for further examination of the question thus raised.

The following results attended the application of the Wassermann test:

Total number of tests	5,928
Percentage of accuracy on 270 autopsies of general paralytics—cerebro-spinal fluid	98·4
Percentage of accuracy on 270 autopsies of general paralytics—serum	98-99
Percentage of positive reaction in 418 adult cases of epilepsy	7·4

Percentage of positive reaction in 284 consecutive male admissions to Cane Hill	31
Percentage of positive reaction in 223 non-paralytic cases	12.5
" " " in 150 male chronic cases	
of some years' residence	8
Percentage of positive reaction in 692 male general cases excluding general paralysis	8.3
Percentage of positive reaction in 259 female general cases excluding general paralysis	8.5
Percentage of positive reaction in 500 non-asylum cases apparently healthy	9.2
Percentage of positive reaction in 365 of the 500 ; never in army or navy	6.02
Percentage of positive reaction in 127 of the 500 who had been in army or navy	18.89
Percentage of positive reaction in 1,483 admissions into Poor Law institutions	19.9
Percentage of positive reaction of these 1,483 in 828 males	20.9
Percentage of positive reaction in these 1,483 in 655 females	18.6
Percentage of positive reaction in 257 young feeble-minded (Stoke Park)	8.1
Percentage of positive reaction in 52 inmates of Borstal Institution	7.7

In all the above, unless otherwise noted, the tests were made with serum.

It is terrible to think from these figures that such a large amount of poison dwells unrecognised among us. From our knowledge of its effects we expect a certain proportion of it among institutional inmates, but to find it in more than appreciable quantity among apparently healthy people is appalling.

The mention of syphilis in ordinary life is taboo, and perhaps justifiably so. But, seeing that it is a matter affecting the race to a lamentable extent, it is very necessary that such statistics should find the light somehow, even in the public press. Probably they would have the effect of preparing the public mind for some such strenuous measure as notification. The liberty of the subject is no doubt very dear to us, and we stand by allowing individuals to poison themselves with alcohol, and hitherto we have stood by allowing individuals to poison others and succeeding generations with syphilis. Perhaps the people on discovering how much more far-reaching is the poison of the spirochæte, will be more ready to suffer the liberty of a comparatively small portion of itself to be curtailed. In order to promote this discovery, we firmly believe that the extent of syphilitic poisoning should receive as much, if not more, prominence that is given to the effects of alcohol.

Touching tuberculosis the report is undoubtedly favourable. The number reported to be suffering from this affliction among the total resident shows an evenly dwindling percentage, but the withdrawal of some quiescent cases from the list may have some effect. When, however, we turn to the indisputable results of autopsy, we find that the

percentage which was 15·3 in 1904, and 16·2 in 1905, has dropped to 12·03 in 1914. So, too, with both dysentery and diarrhoea, though both show some increase over 1913, which was an exceptional year, establishing a marked record, the cases in 1914 are, for both diseases, well below average. These results undoubtedly depend on superior hygiene and greater pathological knowledge, but they spell increased burden on the rate-payer.

Mr. Keene's Statistical Memorandum.—The passage of another year enables Mr. Keene to extend the basis of his independent inquiries to a period of seven years, with a consequent gain in value of the results at which he has arrived. Again, we must emphasise the greatness of the obligation conferred by him on a most important department of psychiatric study. Some people affect to sneer at statistics, just as others affect to sneer at sedatives. Both statistics and sedatives are capable of highly mischievous use, but they are equally capable of most valuable service in the hands of trained men, who are alive to all the dangers connected with their careless employment. Who can gainsay the service rendered by statistics in the establishment of Dr. Mott's theory of anticipation, as noted in late volumes of these Asylum Reports? So with the present array of figures, though perhaps not of immediate value, they must be of immense value later on, with increased skill in reading their true meaning. Their value is enhanced by the fact that many of the statements are made on facts not to be found in the accompanying tables, but which are worked out on recent material available only to Mr. Keene, and which could not be repeated later on without immense labour. On a general view, the state of London insanity seems to be anything but satisfactory. In 1913, the year under review, the recovery rate diminished, being the lowest on record in the last ten years, while the average "exit" by recovery and deaths for the four years, 1910-13, has dropped to 13·35 *per cent.* of population from 15·28 *per cent.* for the years 1906-9, and 21·26 *per cent.* for the years 1890-3. But the proportion of first-attack cases among the admissions is fairly constant, though in this respect males have gone down, the females going up. The number of those removed to an asylum within a month of onset has increased considerably. A seven-year comparison of the ages "on attack" of the "first-attack" cases shows a considerable decrease in those under 30 of both sexes, and of men 40-50 years of age. The average age of the females is higher in 1913 than in any of the seven years, the male average being the same for the last two years, and higher than the average for the seven years.

The tabulation of nine prominent forms of insanity on admission during six years shows, in the course of these years, a gradual but marked falling-off of recent mania, 10·44 *per cent.* of direct admissions in 1913, as against 14·48 *per cent.* in 1908, and the same may be said in regard of recent melancholia, the relative figures being 19·63 *per cent.* against 22·93 *per cent.* Senile dementia has increased from 3·82 to 5·20 *per cent.*, and non-systematised delusional insanity has gradually advanced from 7·83 to 10·17 *per cent.* It seems to be the old story of the bricks and straw.

The "History" table, introduced last year, is repeated this year, with the addition of the 1913 figures. It may be recalled that this is a most

History of Patients under Treatment during Six Years, 1908-13.

Form of mental disorder.	On Registers, Jan. 1st, 1908.	Admitted during 6 years, 1908-13.	Total under treat- ment, 6 years.	Re- covered during 6 years.	Died during 6 years.	Remain- ing 31st Dec., 1913.	Recoveries.		Deaths.
							Per cent. on total admis- sions.	Per cent. on total recoveries.	
Congenital or infantile mental deficiency (idiocy or imbecility)—									
1. Intellectual—					*	*			
(a) With epilepsy	380	404	784	13	168	407	3.22	1.66	21.43
(b) Without epilepsy	986	790	1776	28	222	1263	3.54	1.57	12.50
2. Moral	47	73	120	4	9	70	5.48	3.33	7.50
Insanity occurring later in life—									
1. Insanity with epilepsy	1420	1388	2808	192	639	1553	13.83	6.84	22.76
2. General paralysis of the insane	472	2073	2545	31	2034	430	1.49	1.22	79.92
3. Insanity with grosser brain lesions	176	421	597	49	310	192	11.64	8.21	51.93
4. Acute delirium	4	98	102	41	35	11	41.84	40.20	34.31
5. Confusional insanity	109	1341	1450	432	275	466	32.21	29.79	18.96
6. Stupor	63	246	309	73	48	101	29.67	23.62	1.15
7. Primary dementia	293	665	958	101	169	739	15.19	10.54	17.64
8. Mania—									
(a) Recent	425	2813	3238	1304	1007	422	46.35	40.27	31.10
(b) Chronic	2833	509	3342	87	600	2264	17.09	2.60	17.95
(c) Recurrent	635	943	1578	471	274	537	49.94	29.85	17.36
9. Melancholia—									
(a) Recent	714	4719	5433	2071	1298	785	43.88	38.12	23.89
(b) Chronic	1552	524	2076	166	369	1720	31.68	8.00	17.77
(c) Recurrent	441	1003	1444	543	224	493	54.13	37.60	15.51
10. Alternating insanity	60	73	133	18	14	147	24.66	13.53	10.52
11. Delusional insanity—									
(a) Systematised	1829	1073	2902	113	278	1568	10.53	3.89	9.58
(b) Non-systematised	1399	2100	3499	452	406	2369	21.52	12.91	11.60
12. Volitional insanity									
(a) Impulse	42	57	99	19	8	46	33.33	19.19	8.08
(b) Obsession	11	41	52	20	7	23	48.79	38.46	13.46
(c) Doubt	10	21	31	4	2	21	19.05	12.90	6.45
13. Moral insanity	28	38	66	4	4	32	10.52	6.06	6.06
14. Dementia—									
(a) Senile	656	896	1552	43	827	594	4.80	2.77	53.28
(b) Secondary	4229	648	4877	58	854	4937	8.95	1.19	17.51
Totals	18,814	22,957	41,771	6337	10,081	20,290†	27.60	15.17	24.13

* The total of these 3 columns does not agree with the total number treated owing to numerous discharges "not recovered," and to changes in form of disorder during residence.

† Excluding 36 patients unclassified, being convalescent.

scientific and valuable collaboration of Tables B 5, C 3, D 3, and E 2. The history of all the population on January 1st, 1908, plus the admissions since that date, is traced in terms of recovery, death and *remanet*, the material thus treated being stated by the form of insanity on admission. Of course, the main point is the quotient of recovery in each form. Let us contrast for a moment the averages supplied by this table of recovery (and inferentially of non-recovery) in some of the various forms to which reference is made above. Taking the forms on admission in which *decrease* of occurrence is shown: Recent mania, 46·35 *per cent.*; recent melancholia, 43·88 *per cent.*; and then the converse—senile dementia, 4·80 *per cent.*; non-systematised delusional insanity, 21·52 *per cent.*; we get a convincing proof of the dependence of the recovery rate on the quality of the cases submitted to treatment, and, on the other hand, of the increasing burden resulting from a degradation of that quality.

As we undertook in last year's commentary we reproduce the whole table as it stands, and we feel sure that its great value will be recognised by all who study it carefully.

We are most pleased to state that Mr. Keene has seen his way to give another table, in which the proportions of recovery are stated on similar lines, with the difference that *ætiology* takes the place of forms of insanity. Thus we get, what we have ventured to think is the chief matter at issue, a definite average of prognosis in a patient suffering from insanity attributable to one or other of the *ætiologies* appearing in the official schedule. We think that this table might well take the place of Table C 4 as at present worked out by Mr. Keene. This latter shows only the proportion of recoveries with a given *ætiology* on the total recoveries, and, in our opinion, conveys but little information without a proper consideration of "opportunity"—that is, number of cases computable. Obviously if one black man is admitted out of 100 black and white and he gets well, the ratio of recoveries in blacks, when compared in terms of colour, is 100 *per cent.*, whereas if 50 recoveries take place in the whole hundred his ratio stands at 2 *per cent.* when calculated on total recoveries. There is an additional reason for disestablishing the present treatment of Table C 4. If we have two tables, each of arithmetical unimpeachability, there is a chance of either being chosen for further statistical work by independent inquirers. The effect of choice can be shown from the actual figures given in the two tables.

Recovery Averages (1913).

	Percentages on total recoveries (Table C 4).	Stated number admitted with the given <i>ætiology</i> .
Mental stress	36·51	43·1
Alcohol	25·70	37·7
Insane heredity	29·07	35·6
Puberty and adolescence	10·23	36·5
Alcoholic heredity	10·12	27·4
Privation	2·67	33·9
Syphilis	4·77	12·7
Epilepsy	3·14	14·6
Cardiac vascular degeneration	4·42	14·9

Now, obviously, both these sets of averages cannot be true. Which is preferable? The answer would depend on the question to be studied. On the one hand, we get the probability of recovery from insanity mainly caused by a given morbid factor; on the other, we get a percentage of another percentage on a basis not stated in the table, and therefore not computable on the face of the table. There can be no doubt which would be the best guide in forming a prognosis. Though neither in the heading of the table itself, nor in the body of its report, did the Statistical Committee give any indication for the treatment of the figures supplied, yet we have good reason to believe that the Committee contemplated its use as a guide to a prognosis in insanity resulting from the enumerated factors.

We trust that we may not be accused of carping criticism if we venture to apply the same reasoning, and express the same objections to calculating the death-rate on total deaths. There is, indeed, another argument which applies to the latter form of estimation, both in respect of recoveries and deaths, though more cogently to the latter.

The validity of a percentage of a particular event on the total of all cognate events must depend on the number of events other than the particular event. If one of these other events is more frequent or less frequent, the average of the particular must be correspondingly modified. Thus, should there be a severe and fatal epidemic of dysentery, or should there be a very severe winter leading to higher mortality from bronchitis or broncho-pneumonia, etc., the tuberculosis average would go down. Yet the actual number of tuberculosis might not alter. We again claim that no computation can be valid which does not express the "opportunity" for an event. This can only be done by calculating the average of deaths from any disease on the number of those who are open to attack by it. In the case of the tuberculosis this points to the whole population of the asylum, and on this the percentages should be struck. If the actual deaths from tuberculosis are thus treated, the averages shown in the memorandum are materially altered. Bexley, which stands first in the latter, loses its claim to first place, and is bracketed fourth and fifth with Banstead.

The best testimony to the medical prophylaxis against physical disease is offered by the summary of table D 2 which is given by Mr. Keene. 16.70 *per cent.* of the total deaths occurred in patients over 70 years of age, while 10.58 *per cent.* occurred after twenty years or more of residence, and 1.90 *per cent.* after over forty years.

At the end of the year there remained 1,542 patients over 70 years of age, and 774 with more than forty years' residence. Of this latter class there were more males than females in proportion to the totals of each sex. The proportion of cases of short duration shows a consistent decline in the last six years.

Of the 20,236 cases on December 31st, only 435, or 2.14 *per cent.*, were deemed to have a favourable prognosis, 4.24 *per cent.* were doubtful, leaving a balance of 93.62 *per cent.* regarded as unfavourable. But these alarming figures represent something a trifle better than was found last year.

Mr. Keene acknowledges the help of Mr. Wyett in the preparation of

the Memorandum, and we can do no less than warmly acknowledge the combined service which it represents.

City of London, Stone.—A point which is of great importance to committees of asylums in general has arisen in connection with the pension of the retiring farm bailiff. Unfortunately no details are given, but apparently the bailiff came to Stone after previous experience in more than one Scotch asylum. The question of the amount of contribution to be made by the other asylums has formed the subject of considerable correspondence and an appeal to the Home Secretary. This appeal is now remitted to the General Board of Lunacy for Scotland. As yet no decision has been arrived at. A full list of all entertainments for patients is appended, and shows that this important side of asylum life receives much attention.

Northumberland County.—We venture to reproduce as it stands an appeal to his Committee made by Dr. McDowall, an appeal which might be made by other superintendents who feel that they have as much moral right to speak as Dr. McDowall has acquired from many years of persistent endeavour to push forward to the goal which has been set up by scientific and social experience. There is good reason to hope that, as a general truth, committees are more and more ready to be convinced as to the real nature of their responsibilities. We also venture to think, at least we earnestly hope, that Dr. McDowall's anticipation of his own tenure of office will be falsified. Some old men get older with great difficulty.

You may remember that in the report which I submitted to you last year I briefly brought under your notice the efforts that are being made to awaken interest in scientific research as to the cause and treatment of mental disease. May I again draw your attention to this subject, and at the same time beg your serious consideration of what may be correctly described as one of the great subjects of the day? If I speak with earnestness it is because my opportunities of addressing you must be fast drawing to a close, as this is the fortieth occasion on which I have presented my annual report. To few is it given to remain in office so long at the head of a county asylum, and the feeling is strong within me to make the most of the present time, and to urge you to listen with patience to the pleadings of an old servant. Little more than a year ago you requested your Chairman and others to attend a memorable conference, at which the absolute necessity of scientific research in asylums was urged as the only chance we have of bringing the treatment of mental diseases up to the requirements of modern medicine. The words spoken at that gathering are already bearing fruit, but I shall be miserably disappointed if my own Committee does not respond to the call to take a wide, philanthropic, and progressive view of its duties in relation to the insane. Years of neglect of these higher views as to the care of the insane and the administration of asylums has brought the medical department of this work into bad repute with the medical profession, and at the present time it is almost impossible to get intelligent, keen, young professional men to enter the service. I have the honour of being a member of a committee which has under consideration the drawbacks to the medical work in asylums, and the various difficulties in the way of maintaining a living interest in professional subjects. The essential view that an asylum is at the same time, or should be, a great hospital, has been in far too many instances entirely neglected, with the result that many young medical officers lose heart, cease to have a desire to add something, however little, to the stock of medical knowledge, and become mere machines, doing what is absolutely necessary for them to retain their appointments, but nothing more. A system which thus practically ruins men's lives must be wrong, and should be changed as soon as

possible. To assist in carrying out the necessary reforms I beg you to give the matter further consideration, and not to ignore what is an urgent necessity. It would greatly gratify me if you decided to appoint a small sub-committee to visit two or three places where scientific research of the highest importance is being carried on, with most encouraging results. To take but one example: You are well aware that general paralysis has hitherto been considered an incurable disease and beyond medical treatment. After years of patient research by many observers, the cause of the disease has been demonstrated, and it is but another step to discover an efficient method of treatment, and the result will be that thousands of lives will be saved annually.

It will be admitted that this is a noble work, a high purpose, one worthy of strenuous assistance from all who take an interest in the welfare of their countrymen. In a few instances the committees of county and borough asylums are doing what they can to help. Surely this great and wealthy county will not remain one of the indifferent and idle when it at last is convinced that there is ready at hand a great and good work in which it could render help to the afflicted, and earn the reward of those who do good to the sick. To see this work taken in hand in an earnest and determined way would more than compensate for the past years of indifference and neglect.

Suffolk.—The accommodation is exhausted, in spite of the substantial additions made only a few years ago, and the joint authorities are considering how best to find more, possibly by dissolution and the erection of a new asylum for West Suffolk. Dr. Whitwell regards his recovery-rate of 15·8 as entirely satisfactory. It is, of course, a meagre one in comparison with that of asylums in general, but Dr. Whitwell claims that they are real recoveries, as he passes all through the severe criterion, to which we have formerly referred. He gets rid of all those who do not require to remain, but he will not discharge them as recovered unless they come up to his high standard. As many as 450 patients have been discharged to the care of friends during the past fifteen years, and only 19 *per cent.* have returned to the asylum. Only one of the whole number ended his life by suicide.

Dr. Whitwell adverts to some existing legal provisions with amusing cynicism. He states an interesting aphorism that, "laws are conceived by cranks, mutilated by members of Parliament, and placed on the Statute Book as an act of benevolence to the legal profession." As an instance he points out that, in regard to the discharge of cases to their friends, the latter are bound to give a pledge, which they cannot possibly carry out, that the patient shall be no longer chargeable to any union, etc. These are just the cases where monetary assistance would not only be beneficial to the patient, but an ultimate economy to the union and the county. This is a point which our Parliamentary Committee must not lose sight of when the next attempt to improve lunacy machinery is made. So, too, with the question of the admission of voluntary patients into public asylums, he points out that at present there is a glaring inequality between the treatment of public and private patients. The one can get treatment which he knows to be urgently required for himself, the other has to go through deterrent formalities. No one can doubt that the law must be altered in this respect, but, without some specific legislation, admission into public asylums is impossible by the fact that those who find the payment for maintenance must have, and rightly, too, some voice in determining the means of treatment. The admission of a patient without the cognisance of the relieving officer

would make a district auditor turn in his grave. Still, it would not seem to be difficult to provide that a mentally affected person should be allowed to enter an asylum with the foreknowledge of the relieving officer, but without certification. The latter forms the real difficulty and danger. Dr. Whitwell points out the hollowness of the argument that the Mental Deficiency Act can relieve the asylum of its chronic enfeebled cases. To begin with, these are hardly ever congenital cases, but are resultant of foregoing insanity. His further remarks on the Act are quite apt.

Without being unduly pessimistic as to the results of this somewhat expensive piece of legislation, it is idle to shut our eyes to the following facts:

(1) The higher class feeble-minded person and the early degenerate can never be brought under any law that can be conceived, and these are undoubtedly the most dangerous people, from a heredity point of view, to the community.

(2) A very large source from whence idiots come are just ordinary every-day people, to all intents and purposes normal except apparently for breeding purposes. The appearance of mental obliquity in a family may be an indication of high quality in mentalisation, the appearance of an idiot is nature's indication that that branch should cease to exist.

(3) It is not considered likely that any material diminution of insanity in the community, as is imagined by many people, will result from legislation of this kind, or even legislation of any kind, since the main source of supply of the insane is the sane on the one hand, and the prolific degenerate who cannot be controlled on the other.

Eugenics, which at present seems to have caught the fancy of the public generally, seems to be popular because with many people it appears to consist of recommendations that this or that person (always somebody else) should be legislated for, incarcerated, sterilised, or placed in a lethal-chamber, whereas it would appear that eugenists would, instead of talking of making other people good, do most good in their generation by going home and being good themselves.

Sunderland Borough Asylum.—Dr. Middlemass, in a full and very interesting report, says:

"There were ninety patients admitted in 1913, a decrease of eight compared with the preceding year. This is, in fact, the lowest number of admissions since the asylum was opened over eighteen years ago. The cause for this is by no means clear. Usually when trade is good, and work is plentiful, the admissions tend to increase in number, owing largely to the rise in cases due to alcoholism. Last year the conditions which usually contribute to the prevalence of alcoholism were present, but there was a decided decrease in the number of admissions due to this cause.

"The number of cases of epilepsy continues to be fairly high. There were nine admitted during the year, and there are fifty-eight cases in the asylum now, as there were last year, when I drew attention to the increase which had occurred during the last ten years. They form nearly 15 *per cent.* of all the cases. I fear there is not much prospect of their diminishing in number. Many of them recover from the mental disturbance which was the cause of their becoming patients in the asylum, even though the epileptic fits are not cured. Such patients are discharged, but our experience is that it is almost hopeless for them to obtain employment when they go home. It can hardly be expected that employers will engage them, in view of the very serious risks they run of being injured when at work. In such an event their responsibilities under the Workmen's Compensation Act would be heavy, and the risk great. In fact the risk is so great that insurance companies will not undertake it at all. As a result such patients cannot obtain work, they become more and more anxious as to their future prospects, and in the majority of cases they drift back to the asylum once more. There is, I think, little doubt but that, if they could obtain work, they would, in many cases, be able

to remain at home, and their life would be much happier there than it can be in an asylum, however comfortable it may be. The loss of their liberty is felt by them perhaps more keenly than by any other class of patient. This hardship might be remedied by their being allowed to contract themselves out of the provisions of the Compensation Act, thus removing the chief hindrance to their getting employment. It is, however, doubtful if Parliament would sanction such a measure, though it seems to be eminently suitable for experiment. If tried for a time, experience would show whether it was desirable to continue it."

In another report published in this number of the *Journal of Mental Science*, the writer and Dr. Middlemass are at variance, for the latter says: "It is well-known that insanity is strongly hereditary, and is almost likely to be transmitted by minor mental defect as by that which is more pronounced. In some respects it is more likely to be so transmitted. Last year over 30 *per cent.* of the admissions showed this hereditary influence, and it would no doubt have been considerably higher had full histories been obtainable in all the cases." He goes on to say that the Mental Deficiency Act will do much, in future years especially, to deal with the less marked forms of congenital mental disease, and it will lessen to an increasing extent the transmission of mental disease. An interesting table is included in the statistics showing the degree of heredity existing in the admissions having hereditary predisposition as a factor in their mental state.

East Sussex.—Dr. Taylor is certain that the type of insanity in the district is gradually changing—fewer acute mania or melancholia cases, these being replaced by dementia præcox, paranoidal delusional insanity, etc. General paralytics seem to have a fair span of life here; five males were admitted, while there were thirteen at the end of the year. Only one female paralytic was admitted, and one was imported from outside.

He makes grateful acknowledgment of the recent decision by the After-Care Association to assist "on trial" patients as well as the recovered.

In stating that in 74 *per cent.* of the deaths *post-mortem* examinations were made, he intimates that the number has considerably decreased since the Commissioners expressed the opinion that the consent of the friends must be obtained after the death of the patient.

All patients who have at any time suffered from colitis are now treated periodically with Beta naphthol. The results so far are encouraging. It is hoped that "carrier" cases may be eliminated. Finding that currants in the patients' cake appeared to cause some diarrhoea, he has had sultanas substituted, with good effect.

Dr. Rees Thomas, the pathologist, reports that as the result of tests for syphilis on 200 feeble-minded patients positive reactions were obtained in 5.5 *per cent.* only, while definite stigmata were found in 2 *per cent.* He looks to the rural source of patients for an explanation of these figures, which are far below those of other observers. So, with 125 epileptic, 4 *per cent.* reacted positively.

The engineer still reports favourably of under-feed stokers in comparison with the ordinary stoking. Not only is there a substantial decrease in the amount of coal used (about 20 *per cent.*), but in a given

time the cost of repairs came to £20, as against £66 in a similar period.

Worcester Asylum, Bromsgrove.—Dr. Hughes, in reviewing the work of the year in relation to the causal factors of mental disease, says :

"Family histories of insanity were obtained in 34.9 *per cent.* of the first attack cases of the direct admissions, and in addition a family history of alcoholism, or of 'neuropathic taint,' was found in 40 *per cent.*

"Whilst the hereditary factor is undoubtedly one of the predominating influences in the causation of congenital mental deficiency and certain forms of insanity, I believe that with increasing knowledge of the causation of mental diseases this hereditary taint will not be regarded as of such universal importance. I would instance this by referring to general paralysis of the insane. Now that it is known that this disease is definitely caused by the organism of syphilis, it is recognised that hereditary taint is a much less important causal factor than it was formerly considered to be. Again, in cases of insanity with myxœdema it is recognised that the condition is due to disease of the thyroid gland, and that 'neuropathic taint' has little influence as a causal factor.

"In the same way I believe that in certain large groups of the acute insanities, when the causes are discovered, it will be found that the hereditary factor occupies a less prominent position than is at present assigned to it.

"It is evident that the only hope of progress in the treatment and prevention of these acute mental conditions is centred in research, and it is gratifying to note that the Board of Control have this year allocated a sum of £1,500 for this purpose. The provision of well-equipped laboratories and trained research workers is expensive, and, owing to the intrinsic difficulties of the subject, tangible results in the direction of improved treatment will be slowly forthcoming. But when it is recognised that the increase in the number of the insane, which necessitates such heavy expenditure in the provision of new institutions, is mainly due to the wreckage produced by these acute mental diseases, it will be obvious that provision for research is the wisest policy, and offers the only hope of reducing the number of the mentally afflicted."

In the latter part of the report is recorded the fact that the senior assistant medical officer has been granted leave to marry, and, as no suitable house existed on the asylum estate, the Committee readily consented to arrangements whereby a residence near the asylum could be occupied. This is an innovation which, in these days of the telephone and rapid road transit, surely could be followed by other asylums. At any rate, it will be interesting to see if, in practice, no real objection can be raised. There are only two assistant medical officers. In looking over the tables one is struck by the absence of associated causes of death, although in 85 *per cent.* of the deaths a *post-mortem* examination was held.

County and City of Worcester Asylum.—Dr. Braine-Hartnell, in reviewing the admissions for the year, remarks :

"The chief causes assigned in the direct admissions were as follows :

Heredity	14.9 <i>per cent.</i>
Mental stress	15.7 "
Senility	10.7 "
Alcohol	4.1 "

"Again, I must draw attention to the low percentage of heredity assigned as a cause."

Yorkshire, West Riding, Wakefield.—Dr. Shaw Bolton reports that :—

"During the year out-door treatment of the patients has been continued with

satisfactory results. During the greater part of the year the whole of the recently admitted sick and infirm patients are kept in bed out of doors in the open air from morning until night; the meals are provided out of doors for the whole of the patients in the institution.

"The general health of the Institution during the year has been satisfactory. Dysentery has, however, been rife, 100 cases having occurred during the year. The attacks, on the whole, have been less virulent during the past year, and only twenty cases have died directly from the disease."

It is evident that the Pathological department is upholding the traditions of Wakefield. Apart from papers which have been published in this Journal, a glance at Table Dr will readily convince that no trouble is spared to obtain information. We would direct the attention to this table of those asylums, and there are not a few, who have neglected it, and in some cases left it out entirely. In remarking on the work of the Pathological department Dr. Shaw Bolton says:—

"The routine work of this department has been very heavy during the year. The investigation of the excreta of the numerous cases of dysentery, which has necessitated the preparation and inoculation of several thousands of tubes of media, has been largely responsible for this. Apart from the scientific value of the study of so many cases of this disease, important practical advantages have been obtained, *e.g.*, many cases have been discovered to be dysenteric which otherwise would have been regarded as cases of simple diarrhoea. As part of the routine work of the department, numerous Wassermann reactions have been performed, at the request of the Clinical Staff, on patients suspected to be suffering from general paralysis and other conditions due to syphilis. During the year an unusual number of suspicious sore throats have occurred, but, fortunately, in not a single instance was the organism of diphtheria discovered. As a practical result of the numerous bacteriological examinations which have been made, I may remark that two patients, whose main symptoms were those of pneumonia, were found to give positive Widal reactions, and in each case the typhoid bacillus was obtained from the stools."

Judging by the following remarks, the out-patient department is also fulfilling a useful purpose:—

"During the year sixty-eight new cases were admitted, and the department continues in a flourishing condition. Of the cases admitted during the year 1913, twenty-seven suffered from epilepsy, ten from neurasthenia, five from imbecility, and three from melancholia. The remainder included one or more instances of tic douloureux, tabes dorsalis, chorea, nystagmus, spinal sclerosis, cephalalgia, habit spasm, infantile paralysis, tachycardia, senile dementia, premature dementia, delusional insanity, and hypochondriasis. Four cases were admitted to the asylum."

Some English Registered Hospitals.

Barnwood House.—Dr. Soutar remarks:

The ætiological factors and associated conditions assigned in the direct admissions are set out in Table B7, but it is often doubtful if there is any real relationship between these untoward circumstances in a person's life and the development of the mental disorder from which he suffers. I fear that many of those so-called factors must be taken as the uncritical retrospections of friends searching for an excuse for, rather than for the cause of the illness. When full information can be obtained in regard to the personality of those who ultimately become insane, and of their reactions to ordinary prevailing conditions, it is found that in not a few the process of mental dissolution had begun long before the assigned factors had become operative. There had been, possibly for many years, signs, of which the importance was not appreciated, of that innate mental instability which, in the great majority of cases, is the condition out of which definite mental disorder more

or less slowly evolves. The systematic study of the indications of this instability in children affords scope for investigation which may prove of great service to the community. There are, I believe, reasonable grounds for hoping that a good deal may be done towards the prevention of insanity by recognising the true meaning of the selfish, the vain, the passionate, the suspicious, the untruthful, the hyper-sensitive, the timid, the cruel, the aggressive child, and by imposing wise measures of direction and discipline when the mind is still mouldable. It is not enough if the criterion of mental efficiency be a purely intellectual one. The brain faults which most surely lead to wreck of mind are those which reveal themselves in what we speak of as character. There seems to be more reason to expect a diminution in the incidence of insanity from the careful character training of the unstable child than can be claimed for any of the suggested methods of restricting parentage to a set of persons whom some sapient authority may select as being fit for that function. What is known of the laws of heredity would not help much in the selection of parents. It is true that in 42.4 *per cent.* of our total admissions last year a neuropathic inheritance was ascertained, and it is generally admitted that in about 50 *per cent.* of all cases of mental disorder heredity is a causative factor. We find, however, that from the same families come so many men and women of the highest capacity that our national life is fully compensated for the failure of the few."

The Retreat, York.—Dr. Bedford Pierce recurs to a point put forward in previous reports—the need of an intermediate form of detention; that is to say, detention against will in an institution on lines similar to those of detention against will in a private home, as already provided for in Scotland, and foreshadowed for England. The Association has found in the past that it never knows what it can get till it asks for it, and it has found more and more of later years that attention is paid to its mature opinion in lunacy matters. We may, therefore, hope that, by pertinacity and readiness to take all opportunities, success may eventually follow the persistent demand for this valuable form of treatment.

"If it be thought in the best interest of the patient to be nursed in a special institution it is often extremely difficult to obtain the consent of the relatives. It is occasionally stated that under no circumstances will certificates be allowed. This prejudice, however unwise it may be, must be reckoned with. It arises sometimes from an unwillingness to accept the facts of the case, and in such cases if the physician will call the disorder hysteria or neurasthenia, his advice is likely to be followed, but if he should say the patient is of unsound mind and needs special care, his opinion is not wanted. But quite apart from considerations of this kind, there are sometimes difficulties in the way of certification. The deprivation of civil rights is referred to in the Report of the Association quoted above. One person who was nursed to recovery in the Retreat, suffering from an attack of severe melancholia which lasted less than a month, found on his discharge that he had lost his appointment of managing director of a company. It is, I believe, a common clause in articles of association that insanity disqualifies a director or officer of the company for the management of its affairs. Besides this, when persons are placed under certificates, bankers may cease honouring their cheques, and their business affairs may be hung up in a way that causes great inconvenience.

"Although persons on the verge of a break-down can apply for admission as Voluntary Boarders to Hospitals for the Insane and Licensed Houses, it commonly happens that the patients most needing treatment are not able to make up their minds to apply, or decline to entertain the idea. This is not surprising seeing that the malady in question disturbs the judgment and the reasoning faculties. Even when persuaded to come under care voluntarily, many do not stay long enough to derive any benefit.

"It therefore seems desirable that besides ordinary certified patients and Volun-

tary Boarders there should be a legally recognised intermediate class, which for the present purpose we may call 'notified' patients. Persons so received would be detained for a strictly limited period, say three months, with a power to extend to six months in all, provided the facts of the case were fully notified to the Board of Control, and such medical statements supplied as the Board might require. It is assumed that notified patients would be visited periodically by members of the Board of Control, that no restrictions would be placed upon their correspondence, and that in other ways ample safeguards would be provided against abuse.

"The principle underlying this has long been recognised in the law of Scotland in respect to patients placed under care in private houses, and a similar provision was inserted in a Bill introduced by the Lord Chancellor in 1905.

"But in addition to this, it is much to be desired that early and undeveloped cases should be received temporarily into any institution for the insane approved by the Board of Control without the necessity for formal certification. It is clearly in the interest of such patients that they should be placed under effective treatment at the earliest possible moment. Although in some cases this may be secured in private houses under single care, it will be admitted that a hospital specially constructed for the purpose with a staff of trained officers, with extensive gardens, and all the resources of a well equipped institution will be, generally speaking, more efficient and more likely to produce the best results than private care, however excellent. The fear that additional measures of the kind indicated may lead to abuse is, in my opinion, altogether unjustified. The treatment of incipient cases under private care has been found to work well in Scotland, and if abuses do not occur under this arrangement in private houses, there is much less likelihood of anything of the kind in a hospital which depends upon its reputation for its existence and which is regularly visited by members of Committees, by the Lord Chancellor's Visitors, and by members of the Board of Control."

Some Scottish Royal Asylums.

Edinburgh, Morningside.—One reads of *res angusta domi* with much regret, but an institution so well established and organised as this must have its times of financial trial. We fear that, as the dire war has supervened since their report was written, there will be still greater difficulty in keeping down the lower rates of board. The charge for rate-paid patients has been £34 10s. per annum, or 13s. 3d. per week. This would appear to be above the average cost of the English asylum, but it has to be remembered that while the latter is the maintenance cost, the former includes the payment of rent as well. As the Morningside Corporation is a voluntary body, it has every right to sink its charitable instincts to preserve its financial status, and not only has it a right, but it has a clear duty to adopt the usual business views in getting such a return for its output as will prevent slow deterioration of the means whereby that output is produced. Business before kindliness. Possibly it might take a leaf out of a very well-known book, and seek power to suspend the operation of the sinking-fund for a time. The case of the rate-paid patient is not so hard as that of the private intermediate patient, for the ratepayer is behind him. But it is the friends of the private patient who are hit hard indeed, for the deficit at the time of report was nearly 10 *per cent.* of his cost.

A very commendable step has been taken in the appointment of a medical man, called in America a "field-worker." It is his duty to make special inquiry into the factors of each case admitted. It is quite obvious that the establishment of certain data is necessary to a correct statistical elaboration of the bearings of these data. It is to be hoped that this step will lead to increased value in the medical superintendent's

treatment of that information, which at present is merely assumption of truth. We might add, too, that we hope that the experiment will be followed by some better treatment of ascertained factors than is at present possible with the out-of-date and meagre tables that were good enough before interest, both public and lay, was aroused. Will not Morningside do something towards maintaining its ancient lead in Scotland by some attempt at correlation, some attempt to separate the wheat of direct admissions from the chaff of chronic transfers, some attempt to distinguish from those in and out cases which obscure issue the first-attack cases, which, after all, must be the only guide to answering the question "Is insanity increasing?" We still adhere to our frequently-expressed belief that an enormous amount of material, gathered by the keenest observers, is, year by year, utterly wasted in Scotland for want of proper and harmonious treatment.

In dealing with the question of increase in insanity, Dr. Robertson points out that the population between fifteen and thirty-four years of age has relatively decreased between the census of 1901 and 1911 owing to emigration. He states that it may be assumed that, in consequence of stricter emigration laws in other countries, only those of good health and sound mind thus depart, leaving behind the weaker brethren. Some years ago we pointed out in two directions that this assumption was not a correct one, as the large proportion of insane, coming from one of our kingdoms, was much complained of in the United States and in Australia. In fact it led to the appointment of a medical inspector at Liverpool by the first named. But, after all, he can do but little. He may stop the few people who are likely to attempt to travel with overt signs of insanity on them, but he can do nothing with those who will break down in later years.

Glasgow, Gartnavel.—This great institution has been celebrating its centenary, but the present report only adumbrates the coming thereof. One immense change has been made during that time. Whereas at first it received all the rate-paid insane of Glasgow, it now provides for private patients only, to the number of close on 450. Of these fully one-half pay only £40, or less, per annum. Unlike its great sister in Edinburgh, its finances are not burdened by interest and repayment of loans recently contracted. No doubt it has its stirring times with its admitted cases, but the report all through suggests peaceful efficiency, at least that suggestion is made by some notable figures—one recovery after twenty-three years of residence; two deaths after fifty-four to fifty-five years of residence. Eighteen of 442 resident were over seventy-five years of age, while four admissions and five deaths were of the latter ages. Phthisis caused only one death in twenty-seven, while at the time of report there was no case of active tuberculosis in the hospital. Alcoholism as a factor appears in seventeen out of 120 admissions, but the meaning of this proportion is modified by the fact that it was accompanied in five cases by the predisposition created from former attacks, and in five (possibly the same, or some of them) from hereditary predisposition. Dealing with the difficulties of avoiding relapse after recovery, Dr. Oswald writes:—

Students and teachers return to their studies and teaching (and 10 *per cent.* of

the admissions in a recent year were students and teachers), although brain work was the cause of their breakdown; alcoholics resume their alcoholic excess, and others expose themselves to avoidable stresses with the inevitable result of a further attack.

We may or may not be a fatigued generation, but it cannot be denied that there is an increasing number who have nervous systems unable to bear the strain of the keen competition and special demands of the present day, and whose best hope lies in their appreciation of their own limitations. The burden of earning one's living, previously borne by the muscles, has been transferred to the nerves; in many cases unfitted by heredity, education, and environment to bear it. The commoner causes of insanity are decreasing, but the ominous growth of "nerves," of neurasthenia, and of hysteria, is an undoubted fact to which the attention of every thinking man or woman cannot be too strongly directed.

Perth, James Murray's Asylum.—This is the first report issued by Dr. Dods Brown, who has succeeded Dr. Urquhart as medical director. He refers to his predecessor in the following terms, which all of us must thoroughly endorse. In no more fitting place can his words appear than in those columns which were for so many years under the control of one who is now the subject of their eulogistic comment:—

The most important event in the history of the Institution was the retirement of Dr. Urquhart, in November, after thirty-four years' service as Physician Superintendent. Dr. Urquhart's reputation is an extensive one, not only on account of the office which he held here, but also by the innumerable ways he served the Medico-Psychological and other Societies. The fame of this mental hospital has been made by him, and his name will long remain associated with it. He worked zealously for the Institution, and for the patients, whose confidence and esteem he deservedly earned.

Some Scottish District Asylums.

Aberdeen City, Kingsseat.—Dealing with the question of syphilis Dr. Alexander truly points out that the best means of preventing its spread is the cultivation of character and self-control, and he looks upon the training of the rising generation by such methods as those employed in the Boy Scouts' movement as the most hopeful method of promoting these qualities. Certainly the use of alcohol in the greater part of the country has been lessened by the better view that has come over the public as a result of increased self-respect, and possibly the same may be brought about in regard to syphilis. But the difficulty will always be with the female sex. While it is possible to deal somewhat plainly with boys, especially those who submit themselves to such paternal training as the Boy Scouts have, similar treatment of the subject will be most difficult with girls. It is the women, we take it, who are the most efficient "carriers" of the disease.

It is disappointing, but not altogether surprising, that Dr. Alexander has to report that the number of boarded-out cases who are returned to the institution from various causes militates against a steady and continued increase in the numbers domiciled. More than 150 patients are on parole, and but three broke that parole. The men appear to be infinitely more trustworthy than the women; but the decrease in querulousness and quarrelsomeness, together with an increase in contentment, readiness to work, and general loyalty to the asylum, appear to far outweigh any ill effects of pledge-breaking.

We note that the statistical tables depart largely even from the former tables of the Association. The order is completely changed for no very apparent reason, and the ætiological and classification terms bear no sort of resemblance to those so long in use. Dr. Alexander's classification is presumably his own, as the table includes items such as "Other Intoxication Psychoses," "Psychasthenia," "Neurasthenia," etc., against which no cases are entered. By-the-bye, standing so close to psychasthenia, the term neurasthenia invites a question as to what mental symptoms sufficient to lead to detention are attributable to this "form of mental disorder." We note, too, a form of primary dementia of adolescence. Is this to be taken as a division of adolescent insanity, or as the counterpart of dementia præcox? We have adverted before to the promotion of the condition of hardness of arteries to the dignity of arteriosclerosis. We find here further varieties in arteriopathic and senile dementia.

Ayr District.—Dr. McRae takes much the same line in regard to prevention of syphilis. He looks for improvement in self-control by a return to "home rule" in family life. He truly says that lack of a proper sense of parental responsibility, fostered by love of ease, and the modern invasion into home life of the missapplied doctrine of the liberty of the subject, is the fault that urgently calls for removal. On examining closely the conditions among the recovered of the year, he finds that half the men had alcoholic ætiology, while this was the case in only 5 *per cent.* of the women. He thinks that the frequency of alcoholic admissions among men constitutes a form of hospital abuse which, in his opinion, would be more appropriately dealt with by recourse to prison discipline. We, on the contrary, have always thought good would come from more frequent treatment of habitual drinking as a form of mental disease. Three months in an asylum would be much more beneficial to such cases than one in prison. It might lead the alcoholic to think more of what is going to happen to him unless he reforms, and we take it that, while he evidently does not mind loss of reputation by going to prison, he would greatly dislike being looked upon as "dotty." Of course such observations would, in either view, apply to those whose self-control had not been entirely dissipated. Cases of true dipsomania must go to the asylum anyhow, and not to prison. With regard to the question of insanity as a ground for divorce, he puts the following facts forward: Among the recoveries were those who regained sanity after periods of four, six, seven, ten, and twelve years. As a nut for eugenics to crack, he cites the case of a woman who had the first, and probably the only, attack after the birth of her tenth child.

Glasgow District, Gartloch.—This report is always of interest, as Dr. Parker each year works up-to-date information on certain cardinal points. His wisdom in the original choice of these points is proved by the consistent support given to them by the returns. He shows in a series of seventeen years that the admission-age tends towards the evening of life. Those under 30 tend slowly to decrease, those between 30 and 50 tend to decrease more totally, while, in compensation, those

over 50 have materially increased. *Prima facie*, these figures might be taken to indicate that in Glasgow there is no increase in *occurring* insanity, as against brain failures from age. But Gartloch divides the Glasgow patients with Lenzie, while both are shorn of many occurring cases, which are dealt with in the receiving wards before they get the length of the asylum. We suggest that Lenzie and the receiving wards should work up their relative figures for the same number of years. When the whole are brought together, a most valuable aid would be given to ascertaining how Glasgow stands in relation to insanity. It would, of course, be desirable to confine the returns to first-attack cases. Another table of the utmost value shows the effects of parental alcoholism. It was found in 80 *per cent.* of all admissions under 26 years of age, and in 36 *per cent.* of all admissions over that age. And these proportions are shown much about the same year after year. It would appear that alcoholic heredity tends to Dr. Mott's anticipation almost as much as insane heredity.

One hundred and sixty-eight of the admissions were tested *à la* Wassermann; 38 responded, while 130 were negative. As might be expected, 16 out of 18 paralytics were of the former class. Confusional insanity bore the high proportion of 7 positive to 10 negative, the females having a higher ratio to the numbers tested.

Stirling District, Larbert.—The District Lunacy Board, through its chairman, gives a review of the work done in the fifty-six years which have elapsed since the formation of the Board. It is the song of the dying swan, since its name and constitution are radically altered by the operation of the Mental Deficiency Act. It is somewhat surprising to learn that no less a sum than £242,000 has been spent in providing accommodation for a population of less than 800. This gives a price per bed of about £300. We know that of late years advanced views on the part of the medical superintendents have led to expensive additions, but the memory of visits to it forty years back recalls an extremely nice, but not elaborate institution. However, the Board regard the work with complacency, as less than £50,000 is outstanding, and the assessment to provide for repayment has never been so high as a penny in the pound. The maintenance has been somewhat lower than the average of its class, a shade over ten shillings per week. In view of the activity shown in care and treatment, this is a distinctly moderate rate. The chairman pays a deservedly warm compliment to the various medical superintendents who have directed the work since the year of its inauguration. Drs. Skae, Maclaren, Charles Macpherson, G. M. Robertson, in the past, and R. B. Campbell in the present, have undoubtedly done their best to support an enlightened Board, and to advance psychiatry. The new Act will undoubtedly bring about much change in administration, financial and otherwise, and it will remain to be seen whether or not the greater success will result from the care of the insane and of the mental deficient being compulsorily in the hands of one Board, as in Scotland, or in the hands of two independent committees, as may be, and frequently is, the case in England.

Report of Lunacy in Egypt, 1914.

This is the nineteenth annual report of the parent asylum at Abbassia, and the second of the new asylum at Khanka.

Again we have to remark upon the elaborate nature of the report ; nothing is wanting from the diagram showing the admission rates, the deaths, the mean temperatures, the amount of seclusions, and the use of hypnotics.

Besides this, the economic side is fully treated. And one marvels how it is all done, notwithstanding the over pressure of work and under-manning of the asylum.

The chief special points for remark are, first, the tragic death of the second physician at Abbassia, and the want of a second English doctor to replace him ; next, the so far satisfactory introduction of English female nurses ; and, third, the further development of the second asylum at Khanka, which to a slight extent gave some relief to the pressure on Abbassia.

During 1913, 869 patients were admitted direct into Abbassia, while 460 were temporarily treated in local hospitals. Pellagra showed an increase, and is reported as being the most frequent cause of insanity in Egypt.

As usual, there was excess of patients over accommodation, but this was being reduced by transference of more quiet patients to Khanka, where a considerable amount of gardening is done by the patients.

Five hundred and eleven cases were discharged during the year, of whom 194 males and 20 females were still insane.

This is referred to later in the report, where it is shown that these contributed to readmissions and to criminal acts. The death-rate was high, $12\frac{1}{4}$ per cent. on the average number resident, but this is less than the death-rate of 1912.

The slight reduction of the overcrowding has allowed more patients to be retained till they were really well, no female patient being readmitted during the year.

Scattered about Egypt are many local hospitals under the supervision of native doctors, and local cases of insanity are usually sent to these hospitals first, and are not certified. Dr. Warnock thinks most of the patients were certifiable, but only some of them have to be sent to Abbassia.

At the central asylum all the female patients are retained, also all the acute and troublesome cases, and the criminal lunatics, so that all, or nearly all, the administrative work falls on Dr. Warnock.

It is satisfactory to know that his position has to a great extent been improved, for now he is the Government Inspector of Lunatics for Egypt, and is no longer responsible to the Public Health Department, but is directly under the Ministry of the Interior. Still is wanting established Lunacy Law, and the further development of other asylums, and we fear that the purse strings will be tied, and little more will be done in the immediate present.

One of the great difficulties in Egypt is the want of water, and the further development of labour at Khanka is barred by this want.

The second part of the report is chiefly concerned with the

economical side of the work, and need not be specially referred to here, but will be found to be very interesting and informing for the Superintendents of our large asylums.

A laboratory for scientific work has been arranged, but neither time nor workers have been available. Many fewer murders have been committed by lunatics at large, and the number of criminal lunatics has also markedly decreased.

There are interesting tables showing the forms of insanity associated with different criminal acts. Table VII gives the nationalities of the general paralytics, the great majority being male Egyptians. Forty of the 51 cases had signs or histories of syphilis, and 16 were alcoholic.

Seven *per cent.* of the male admissions were general paralytics, and 18 of the 108 deaths of male patients were due to the same cause.

The chief causes of insanity in Egypt are pellagra, congenital and hereditary defects, hashish, syphilis, and alcohol. One third of the deaths were due to pellagra. Tuberculosis and dysentery rank high as causes of death. The dysentery is of the bacillary type. The patients were treated with salines, and injected with sera, the results being very satisfactory.

There was a total of 870 accidents, a most alarming number compared with our asylum experience. These were mostly due to patients quarrelling amongst themselves.

The report of Dr. Dudgeon of the work at Khanka is satisfactory and encouraging.

The asylum is fearfully isolated, and the Superintendent and his family are almost the only Europeans in the neighbourhood.

Good practical work is being done, tree growing and nursery gardening, besides growth of vegetables for the parent asylum, being carried on. More could be done if the quiet and chronic patients could be retained longer. This may in time follow, so that a large part of the asylum may become a chronic asylum.

Dr. Dudgeon reports a greatly reduced use of sedatives, and, on the whole, there is everywhere a spirit of progress.

In concluding this review, we must once more extend our congratulations and sympathy to the men who thus, under very trying conditions, are carrying philanthropic work along the best lines, and with the true British feeling.

G. S.

Part IV.—Notes and News.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND.

THE QUARTERLY MEETING was held at the Medical Society's Rooms, No. 11, Chandos Street, Cavendish Square, London, W., on Thursday, February 18th, 1915, Dr. David G. Thomson, President, in the chair.

There were present: Drs. T. S. Adair, R. Armstrong-Jones, H. M. Baker, Fletcher Beach, E. H. Beresford, D. Bower, A. N. Boycott, J. Chambers, R. H.

Cole, M. A. Collins, M. Craig, H. Devine, A. R. Douglas, E. Dove, G. C. Fitzgerald, B. Hart, H. E. Haynes, F. Hughes, P. T. Hughes, D. Hunter, J. Keay, H. A. Kidd, R. Legge, J. R. Lord, A. W. Neill, W. F. Nelis, D. Ogilvy, D. Orr, G. E. Peachell, J. G. P. Phillips, Bedford Pierce, D. Rice, L. W. Rolleston, J. M. Rutherford, E. F. Sall, Sir G. H. Savage, G. E. Shuttleworth, J. G. Soutar, R. Percy Smith, R. H. Steen, R. M. Stewart, J. Tattersall, T. Seymour Tuke, and H. Wolseley-Lewis.

Visitors.—Drs. L. Calthrop, T. Duff, N. Walmisley, and W. R. Watson.

Present at the previous Council Meeting: The President (Dr. D. G. Thomson) in the Chair, Drs. T. S. Adair, E. H. Beresford, J. Chambers, R. H. Cole, M. A. Collins, H. Devine, A. R. Douglas, B. Hart, J. Keay, J. R. Lord, Hayes Newington, G. E. Peachell, J. Noel Sergeant, J. G. Soutar, R. H. Steen, T. Seymour Tuke, and H. Wolseley-Lewis.

MINUTES.

The minutes of the last meeting, having appeared in the Journal, were duly approved and signed.

MEMBERS ON NATIONAL SERVICE.

The PRESIDENT said he was sure it must be a source of gratification to the Association that several of their brethren were serving the country, either at home or abroad. The Association knew of some ten, but there were probably many others, and he invited members who knew of any who were serving in this way to send a note to Dr. Collins.

ELECTION OF CANDIDATES AS MEMBERS.

The PRESIDENT nominated as scrutineers Dr. Adair and Dr. Hunter.

The following gentlemen were then balloted for and duly elected ordinary members:

DILLON, FREDERICK, M.B., Ch.B., Edinburgh University, Assistant Medical Officer, Northumberland House; Clinical Assistant, West End Hospital for Nervous Diseases; Northumberland House, Green Lanes, Finsbury Park, N.

Proposed by Drs. Bernard Hart, G. F. Barham, and J. E. Martin.

DUFF, THOMAS, L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glas., Collington Rise, Bexhill-on-Sea.

Proposed by Drs. D. G. Thomson, Maurice Craig, and M. A. Collins.

KITSON, FREDERICK HUBERT, M.B., Ch.B. (Leeds), Assistant Medical Officer, West Riding Asylum, Wakefield.

Proposed by Drs. J. Shaw Bolton, H. S. Gettings, and T. Stewart Adair.

MONRAD-KROHN, G. H., M.B., B.S., M.R.C.P. Lond., M.R.C.S. Eng., 4th Assistant Medical Officer, London County Asylum, Bexley, Kent.

Proposed by Drs. T. E. K. Stansfield, E. Faulks, and John Brander.

PENNANT, DYFRIG HUWS, M.R.C.S. Eng., L.R.C.P. Lond., Assistant Medical Officer, Barnwood House, Gloucester.

Proposed by Drs. James Greig Soutar, Arthur Townsend, and M. A. Collins

COMMUNICATION.

A paper, with lantern demonstration, on "Meningo-vascular Syphilis," was read by ROY M. STEWART, M.D., Ch.B., which will in due course appear in the Journal.

The PRESIDENT said this was one of those learned and exhaustive papers which were not so much matter for discussion, as for tendering thanks to the author and admiration of his work. So that, unless any member had a desire to discuss the paper, he would convey to Dr. Stewart the Association's thanks for his contribution.

SCOTTISH DIVISION.

A MEETING of the Scottish Division of the Medico-Psychological Association was held in the Hall of the Royal Faculty of Physicians and Surgeons, St. Vincent Street, Glasgow, on Friday, March 19th, 1915.

Present: Drs. Cruickshank, Dods Brown, Hotchkis, Carlyle Johnstone, Keay, Macdonald, Oswald, Dunlop Robertson, Roberts, Shaw, Tulloch, Ferguson Watson, David Yellowlees, H. Yellowlees, and Dr. R. B. Campbell, Divisional Secretary.

Dr. Keay was called to the chair.

The minutes of the last Divisional meeting were read and approved, and the Chairman was authorised to sign them.

Apologies for absence were intimated from Dr. David Thomson (President of the Association), Sir Thomas Clouston, Drs. Turnbull, G. M. Robertson, Easterbrook, Fraser, Alexander, McRae, Mackenzie, and Ross.

The SECRETARY submitted a letter of acknowledgment from Dr. Turnbull, thanking the members of the Division for their kind expressions towards him on his retirement from the Medical Superintendentship of Fife and Kinross District Asylum.

Drs. Neil, T. Kerr, and James Orr were unanimously elected representative members of Council, and Dr. R. B. Campbell was elected Divisional Secretary.

Dr. J. H. Macdonald was nominated as an Examiner for the Certificate in Psychological Medicine, and Dr. R. B. Campbell was nominated as Examiner for the Final Nursing Examination.

The following candidate, after ballot, was admitted to membership of the Association:

James McAlpine Scott, M.D., Ch.B.Glas., Assistant Physician, Stirling District Asylum, Larbert. (Proposed by Drs. Campbell, Keay, and Gostwyck.)

Dr. KEAY, President-elect, stated that the Annual Meeting of the Association was to be held in Edinburgh this year, and that the dates of the meeting had been fixed for July 22nd and 23rd. An informal conversation took place regarding provisional arrangements.

Dr. DUNLOP ROBERTSON read an interesting paper on "The Genesis of Auto-intoxication in the Catatonic Type of Dementia Præcox from a Hereditarily Transmitted Defective Biochemism," which was discussed by Drs. YELLOWLEES, OSWALD, MACDONALD, and CRUICKSHANK. (A copy of the paper will appear in the Journal.)

Dr. W. T. TULLOCH read an interesting paper on "The Gold Colloid Test in General Paralysis," which was discussed by Drs. SHAW, CRUICKSHANK, and HENRY YELLOWLEES.

A vote of thanks to the Chairman for presiding concluded the business of the meeting.

THE MENTAL AFTER-CARE ASSOCIATION.

ANNUAL MEETING, HELD AT BETHLEM HOSPITAL, MARCH 2ND, 1915.

Dr. HENRY RAYNER, in opening the proceedings, said "it had been the custom of the Association that the chair at this Annual Meeting should be taken by some well-known man, whose position and eloquence would tend to attract visitors. This year the war with Germany has created new associations and charitable efforts in connection with the navy and army, and our Belgian allies, and consequently every man of eminence is fully occupied. It has, therefore, been decided this year to make our meeting a domestic one, if I may so call it, and hence, as Chairman, I am called on to preside. Under these circumstances, and as the number of visitors is probably small, I shall not state fully the objects and aims of the Association, with the reasons which make their support desirable, according to established precedent. I am sure that the speakers to the various resolutions will make these points obvious to any visitors who may be present, and with much

greater clearness and eloquence than I can command. There are a few retrospects and other points that I should like to draw attention to. This Association from the beginning has made slow but always steady progress in the amount of the work undertaken, and I am sure that this work has been increasingly successful, both in the large number of cases re-started in life, and in the most satisfactory manner with which they have been dealt. This has been the result of the accumulated knowledge, together with the increase in our working staff both in number and efficiency. Of course this advance in the convalescing of our cases tends to prevent relapse, which is one of the great objects of our Association. The work has also made very satisfactory progress in its relations to boards of guardians and committees of asylums, who now give us much more cordial help than in the earlier days of our existence. Considering our progress, we must recollect that the Association was originally started for women only, but was later extended to men, and was first intended for those discharged from asylums, but now we take cases from any mental institution. In 1913 a still more important extension of our work was made, namely, extending the sphere of the Association to cases on trial. This last is a most valuable departure. It is only now in its infancy, but we hope it will grow as time goes on. Hitherto we have been able to find cottage homes in sufficient number for our cases, but we have not yet homes of our own. We have accumulated a considerable reserve fund which will enable us to meet this difficulty when it arises, and experience will guide us to provide several smaller homes rather than to establish one large building. This year has been of unusual interest in the life of the Association from our having adopted an amended constitution. This was needed for a number of reasons. Firstly, it enabled us to alter the title, the old one being no longer descriptive. A change in the constitution was also needed for the new trustee arrangement, which we had decided to adopt, and a further reason was the extension of the work to patients on probation. These did not come within the scope of our old constitution. When I was a medical superintendent of an asylum I often felt most acutely the need of help for the trial cases, and I always looked forward to the time when the growth of the Association and funds would enable us to deal with them. Many of us anticipated so much work would be entailed by this new departure that we should find difficulty in dealing with it. This has so far not proved the case. Before the report is read I must express the regret which we all share that for the first time since 1877 our Secretary, Mr. Roxby, is unable to attend the Annual Meeting, and has written to apologise for his absence. He writes that he is much better, and I hope there is every probability that he will soon be at work again. We all know how much he has the welfare of the Association at heart, how hard he has worked in all these years, and his disappointment at not being present will be great. I am sure it will be some alleviation to him if this meeting will authorise me to express our regret at his absence."

REPORT OF THE COUNCIL (ABSTRACT).

From January 1st to December 31st, 1914.

It is glad to say that, although not much progress has been made, the work has certainly not gone back as a result of the war, which in itself is likely to increase the calls on the Association.

The Council has been more than justified in the extension of the work adopted in November, 1913, when it was first decided to take cases on trial. Since then 36 cases have been received while on probation, and in almost every instance have been very satisfactorily dealt with.

The most important event of the Association's year was the alteration of the title from that by which it was known to that of "The Mental After Care Association for Poor Persons Convalescent or Recovered from Institutions for the Insane." A Meeting of Subscribers was held for this purpose at Bethlem Royal Hospital in July, under the presidency of Dr. Henry Rayner, and the alteration was unanimously accepted. At the same gathering the new Constitution drawn up for the Association by the Honorary Solicitors was adopted, and the Union of London & Smiths Bank, Princes Street, London, E.C., was appointed Trustee.

Finance.—The total amounts received in 1914 and 1913 were made up as follows:—

1914.	£	s.	d.	1913.	£	s.	d.
Subscriptions and donations, including amounts collected at meetings	718	3	3	Subscriptions and donations, including amounts collected at meetings	838	6	8
Donations for special cases ...	19	1	10	Donations for special cases ...	59	0	8
Guild of Help	29	18	6	Guild of Help	42	2	0
Dividends on investments and interests on deposits ...	190	4	3	Legacies	1,166	13	4
Donation from Queen Adelaide's Fund, Commissioners in Lunacy's Fund, repayments for outfit and maintenance, and contributions from friends ...	273	13	4	Dividends on investments and interests on deposits ...	159	0	
Return of income tax	17	3	6	Donation from Queen Adelaide's Fund, Commissioners in Lunacy's Fund, repayments for outfit and maintenance, and contributions from friends ...	141	15	4
				Affiliation fee from Birmingham Branch	3	3	0
	<u>£1,248</u>	<u>4</u>	<u>8</u>		<u>£2,410</u>	<u>1</u>	<u>7</u>

It will be seen that the actual income from subscriptions and donations has considerably decreased, while the total receipts are much smaller, owing to the fact that in the year under review no legacies were received. The Council is faced, like all other charities at present, with the very grave possibility of a serious decrease of income this year, as already many old subscribers have, owing to many calls and increased taxation, reduced or withdrawn their contributions, and it is most earnestly hoped that those who can do so will not only support the work as generously as before, but will also endeavour by interesting others to make the Association more widely known. The Council feel that this, which is a unique charity doing a work which is not touched by any other Association, should appeal to all those who have true philanthropy at heart. The cases are very sad, often exceptionally difficult, and many patients would have no possibility of relief from their perplexity or trouble but for the help of this Association. That the work is greatly appreciated by those for whom it is intended is abundantly proved by the willingness with which they endeavour to repay, at any rate, part of the expenses incurred in giving them their fresh start, and by the way in which those, who have been previously helped, frequently of their own accord, when in happier circumstances, send donations to help other cases.

Cases.—During the past year applications on behalf of 373 persons were received. Of these, 225 were women and 148 were men. Although this is the total number of those who were considered by the Council, it does not at all represent the number dealt with, as nearly 200 old cases either wrote or called at the office during the past twelve months, none of whom are included in the above total.

One of the most important functions of the Association is finding suitable occupation for persons who, although recovered, would probably have great difficulty in re-starting in life. The bestowal of a large amount of personal care and individual attention on each case is necessitated, and careful investigation of the suitability of those with whom they are placed. The result of this part of the work is far greater than the mere supplying of temporary homes, clothing, or grants for maintenance and tools, important though these may be. The strongest possible evidence of the utility of this Charity is shown not only in the comfort and aid given, but in the prevention of relapse, many who have had previous attacks remaining well since they have been under the influence of the Staff of the Association.

Since the appointment of the present Secretary in 1886, between 5,000 and 6,000 cases have been considered by the Council, and of these a very large number, although suitably re-started in various spheres of work, require counsel in many ways, and call at the office to see some member of the staff from time to time. Advice is freely given and frequently enables such patients to overcome their difficulties satisfactorily, and tends to prevent mental strain, which is particularly undesirable in the cases with which the Association deals.

Council.—The Council has received with much regret the resignation of Mrs. Coupland, who was obliged to retire on account of health, and of Dr. R. W. Gilmour, who is now living too far from London to attend the meetings; but it is glad to state that Dr. Porter Phillips, Resident Physician of Bethlem Royal

Hospital, and Mrs. C. M. Wilson, Poor Law Guardian (Hammersmith), have kindly consented to fill these vacancies. On the resignation of the Rev. H. Stephens as Hon. Secretary of the Essex (Brentwood) Branch, the Council, as a slight mark of its great appreciation of his services, asked him to join it, but this he was unable to do as he now lived too far away to attend the meetings.

City Corporation and Companies—The Council thanks the Corporation of the City of London and the following City Companies for their donations to the funds of the Association during 1914 or in past years: The Worshipful Companies of Clothworkers, Drapers, Fishmongers, Grocers, Leathersellers, Mercers, Merchant Taylors, Salters, Skinners, and Vintners.

Guardians of the Poor.—The Guardians of Barnet, Bromley (Kent), Cardiff, St. Giles, Camberwell, Chelsea, Cranbrook, Cuckfield, Dartford, Eastbourne, Fulham, Gravesend, Hastings, Hammersmith, Hampstead, Hendon, Kensington, Lambeth, Malling, Medway, Paddington, Sevenoaks, St. Pancras, Steyning, Stratford-on-Avon, Strood (Kent), Ticehurst, Tonbridge, Wandsworth, and Willesden, all subscribed to the funds of the Association in 1914. To these Boards of Guardians the Council tenders its best thanks for their most useful contributions.

Guild of Help.—It was a great disappointment that this Guild was obliged indefinitely to postpone the Model Market which had been arranged to take place in the autumn, from which in past years so much substantial financial aid has been forthcoming. The Guild has, however, if anything, increased its kind gifts of clothing through the past year, and has also contributed in subscriptions and donations the total amount of £27 18s. 6d., for which the Association desires once again to express its grateful thanks.

The following account has been received from the *Birmingham Affiliated Branch*: "This year all patients discharged from the City Mental Hospital have been visited, in addition to a few special cases from last year's list. This makes a total of 270. Thirty-eight of these have been assisted in various ways, *e. g.*, by help being given to find work, by gifts of clothing, money, milk, or grocery orders. For a few friendless patients lodgings have been found and paid for pending the obtaining of employment. Twenty-five women have been reported to the British Women's Temperance Association, and are now being visited regularly by members of that Society, and some encouraging results have been obtained.

"Though not directly connected with the After-Care of patients, it is perhaps worth mentioning that we have formed a Branch of the Brabazon Work Society to interest and give employment to the more convalescent inmates of the City Mental Hospital. The sewing-class is held once a week, and is much looked forward to by the patients. The local President of the Brabazon Work Society, Councillor Clara Martineau, kindly allowed the sale of their work to be held at her house."

Dr. NEEDHAM: You have had the Report read, and I have been asked to propose that it be received and adopted, which I do with very great pleasure because I feel, and always have felt a kindness and warm interest in this Association, which I know to be doing perfectly excellent work in the most admirable manner and to be of the greatest use. If I could infuse into you a spirit of enthusiasm about the future of the Association I should turn every one of you into missionaries by getting your neighbours and friends to share with you in supporting an institution which so thoroughly deserves it. In spite of the war, which absorbs everyone, this report says the work is not going back, and I suppose it will not be allowed to go back, although the war is a very vital thing with us. This charity ought to be a very present influence amongst us, because every day the work of this Society is tremendously needed throughout the country. I am very glad that since 1913 cases on probation have been dealt with by the Association. One knows that when people are recovering from a serious illness how important it is that they should have some sort of encouragement to enable them to make a fresh start. The income of the Association is very small, and is quite inadequate for the work that may be done by a society of this kind. Three hundred and seventy-three persons seem to have applied for help during the year, and I am glad to see that touch is kept up with those people who have been dealt with by the Society, so that they are not allowed to go entirely out of sight, it is always something to which they can cling, and it endeavours to provide suitable occupation for persons who have recovered, and to re-start them in life. One knows how

great the difficulty must be for people who have undergone the stigma of insanity to rehabilitate themselves, and to regain their former position or improve upon it. There is no doubt that this Society has in the past, and I hope will in the future, do very much to prevent the falling back of so many people, who, except for such a Society, would become more and more unfitted to do their work in the world. The number of cases considered since the appointment of the present Secretary in 1886 is a very large one, between 5,000 and 6,000, and we know what an enormous influence for good this must have been. I won't say more, but I do commend this Association to your care and support as an institution which can be thoroughly relied upon, and can do and is doing a very great deal of good in a determined manner.

Dr. R. PERCY SMITH: I have much pleasure in rising to second the adoption of the Report. I see there are a good many people to speak on the programme, therefore my words will be very few. I am very glad to speak on this occasion, in a double capacity, as a member of the Council, and as Governor of the Hospital, and I may say, on behalf of the Committee of the latter, that we are always glad to welcome the Mental After-Care Association meetings here. Although most of the patients in this institution are of a different class in life, whose people can afford to pay for them, yet some of the patients here are helped by the Association. I should like to say that hardly any council or association is better served by its staff than the M.A.C.A., not only in the office work, but in the extremely important work of personal service, being in touch with the cases, and able to give them valuable advice. With regard to the extension of the work I am agreeably disappointed. When the suggestion was made of taking cases on probation it seemed to me that we were opening the door to a great many difficulties, but I was wrong, and the cases have been, on the whole, most successfully dealt with. With regard to finance, the most serious item is a drop in our receipts for the year of over a thousand pounds, but you must remember we had legacies to the amount of £1,166 13s. 4d. in 1913, and we have had none this year. That accounts largely for the difference. Comparing 1914 and 1913, the subscriptions have been £120 less. That is a serious item, but the Treasurer, no doubt, will draw your attention to it later on, and will point out the need of more help. The Association is in a very good position as regards capital. The interest which the Board of Control, and other officials connected with the mental department, take in the work is shown by the fact that they are always present at the annual meeting, and that there is a special fund for such cases as are helped by this Association. When dealing with mental cases one of the most remarkable things we find is the number of patients who have been for many years in an asylum, and have then recovered. The popular idea is that once a person is insane, always insane. This is a fallacy. The presumption against recovery is very much stronger in cases that have been long under detention, but we have known of persons recovering after thirty-seven years in an asylum, and more frequently after twenty years.

Dr. HELEN WEBB: Of course in this bad year we are not surprised that our funds have gone down, but the moral of our funds having gone down is that we must all exert ourselves to make them go up. What I should like is that we should get more people, who, if they cannot do much, can still do a little. There are all kinds of smaller things that can be done to help on the work, holding drawing room meetings, getting up working parties, etc. We shall be very glad if any ladies present will join the Guild of Help which assists the Association by gifts of clothing, as well as gifts of money. It is rather interesting to see the letters which some of the cases write. The human side is the thing that is really bearing the fruit, and some of the letters received at the office give a very good idea of that. The work of the Society is work that is extremely well worth the doing, and we can at least spread the knowledge of it among our friends, and try to get more people interested in it.

Sir GEORGE SAVAGE: I thought for once you were going to be allowed to go away without hearing me talk. Really, I came unprepared, but naturally my connection with this Association has been such a lengthy one, and I have had to speak so frequently on the same subject, that you will think, perhaps, that I am an importunate beggar. It is my function here to point out what we are doing, and one feels the enormous work that is being done, and the great future that is before us. In this Report you have an epitome of work, but you have no idea of the mine work, the trench

digging that is going on. I am extremely sorry that Mr. Roxby is not here. I can well speak of the competency of the work that is being done. It is the individual touch with each case that counts. Very much more is often done by a word than by a pound. People in difficulties feel that they can go back to the office and find a friend, who will not give them a piece of paper to fill up, but will take a human and lively interest in them. I have frequently had to say how from the financial point of view that it is all important that the work of the Association should not be allowed to flag. Relapse is one of the greatest dangers of mental disease. We have hundreds of examples of people who have got well, and are holding very good positions in life. When patients convalesce it is not certain they are perfectly strong. There are lots of people who have been insane who are sufficiently well to send home or away, whose strength might break down if the mental strain were only partly repaired. After our experience we know that there is a habit of insanity, patients who are said to be chronic or recurring lunatics. Part of the work is to prevent these relapses, and it is being very efficiently done. I can only say that at the Council meetings which I attend when I can, every case is considered on its own merits, and is looked at fairly and squarely, and there are also a number of cases that come up regularly for consideration. I have the greatest pleasure in supporting the Report which is before us, and I hope you will return the compliment, and support the Treasurer.

Carried unanimously.

Dr. TAYLOR, proposed the re-election of Officers and Council.

The Hon. JOHN MANSFIELD seconded the resolution, which was carried unanimously.

Mr. STANLEY KEITH proposed a vote of thanks to doctors who have seen cases gratuitously during the last twelve months.

Dr. CRAIG, in moving a vote of thanks to the Governors of Bethlem for their kindness in extending hospitality to the Association that afternoon, said: "I do so with much pleasure for two reasons, first, because many of the Governors are old and valuable friends of my own, and, in the second place, because there is no body of men more alive to the needs of the mentally afflicted, and who are more willing to meet those needs in every way possible in their power. If everyone did as much for the care of the insane as the Governors of Bethlem, the work of this Association would be much easier than it is. We are going to leave to your imagination how much wider this field of work might be if there were more funds available. The philanthropic public is seldom approached in vain in the cause of charity, but when it comes to the mentally afflicted it is a different matter, though there should be no difference at all. A patient suffering from mental disease suffers a great deal more than one suffering from other diseases, and mental cases ought to be studied first if you are going to make any distinction. There should be no distinction, but if one is made it should be made in favour of the mentally afflicted."

Dr. LLOYD, R.N., seconded the vote.

Carried unanimously.

A vote of thanks to the Chairman, Dr. Rayner, proposed by Dr. STODDART, closed the meeting.

EXAMINATION FOR NURSING CERTIFICATE.

List of Successful Candidates.

PRELIMINARY, NOVEMBER, 1914.

Bloemfontein, S.A.—Mabel Levenia du Plessis.

Grahamstown, S.A.—William Henry Hall, Ockert Johannes Goosen, Elizabeth J. Connolly, Martha S. Marsburg.

Pretoria.—Winifred Commins, Leonard van Smaalen, Ada Parkinson, Emily Shrimpton, Walter W. Montjoie, Joanna M. Coetzee.

Valkenberg, S.A.—Josias Martin Smuts, Wilfred E. Harris, Ethel Florence Ings, Mabel Ethel G. Hawksley.

Federated Malay States, Central.—Thamatharampilly Ampaloranan.

Denbigh.—Lizzie B. Jones, Myfanwy Lloyd, Lizzie Jane Williams, Emily Edwards.

- Brentwood*.—Sarah Collins.
Kent County, Maidstone.—Ada Verrall.
Rainhill.—Sarah Champion, Rose Johnstone, Rosa Margaret Mitford, Agnes Murtagh, Ethel M. Vickers-Jones.
Staffordshire, Cheddleton.—Ailasa M. Brennan, Joanna J. Fitzgerald, Alice Middleton, Matilda S. Givin, Hannah Robinson, Laura Brysting, Winnie D. Butler, Nellie May Bright.
Yorks, Menston.—Hilda Mary Marsh, Mabel Aird, Violet Allison, Cissie Phillips, Annie Nolan, Maggie Nolan, Lena Pickard, Margaret Brander, Florence Glover.
Yorks, Wakefield.—Norah Kathleen Boston, Oscar Burkinshaw, Willie Artingstall, Joe Binks.
Rubery Hill, Birmingham.—Gertrude A. Bevan.
Winson Green, Birmingham.—Edward Lloyd, Clara Rose Newbold, Robert James Tring, Sarah Brassington, Katherine H. Kendrick, Edith E. Lowe.
Derby Boro'.—Kate Elizabeth Jennings, William Brown.
Leavesden.—Ethel May Webb, William Henry Lawrence, Thomas Henry Grundy, Ellen Hill.
Norwich City.—Gertrude L. Cushing, Ada Maud Clarke.
Bethlem Royal.—Grace Rose Lowman, Mary Scott Seymour, Agnes Dye, Isabel Gayburn.
Camberwell House.—Daisy B. Bates, Dorothy S. Breem, Mary Smith.
Coton Hill.—Elfrida Perks.
Fountain Temporary, Tooting.—Lillian G. Culleton, Cecilia May Parker, Florence Alice Shilling.
Retreat, York.—Jane M. Dagg, Jennie Haslam, Annie Horne, Grace Huitson, Jennie Huitson, Jessie Scott MacGregor, Albert Stephenson, Joseph William Traynor, William Wood Weatherill.
St. Andrew's, Northampton.—William S. Brown, Andrew Short, Rose Clarke.
Warneford, Oxford.—Maggie Lowry, Harriet Elizabeth Ash.
Aberdeen Royal.—Helen Jane Smith, Mary Watson, Jeannie Clark, Annie Clark, Mary Smith, Mary Thomson Paul, Margaret Hutchinson, Mary Ross, Muriel Florence Roy.
Bangour Village.—Annie E. Macdonald, Helen A. Murden, Elizabeth B. Ptolmey, Minnie M. Tennant.
Craig House.—Jane A. Curry, Christina Davidson, Mary C. Hamilton, Flora Macrae, Mary J. Irvine, Jeannie W. Macdonald.
Morningside, West House.—Beatrice Smith, Annie J. Lee, Jessie Ewing, Margaret M. Hatley, Margaret McGuire, Margaret G. Gerard, Isabella Lyell, Elizabeth Scott.
Glasgow, Gartloch.—William Brown Thomson, Hughie Mackay, Murdina McDonald, Annie Macdonald, Euphemia E. Blyth, Janet S. Scott, Christina B. Crosbie.
Glasgow, Woodilee.—Frederick A. Bownas, James Gartshore, Agnes Smith, Johanna Heffernan.
Inverness District.—Alexanderina Macdonald, Margaret A. McCulloch, Dolina C. MacDonald.
Hawkhead.—Annie Macdonald, Andrew Grant.
Murray, Perth.—Margaret L. Walker, Thomas Wynd, Margaret Haggart, Evelyn Florence Henderson, Jane C. Thomson.
Larbert, Stirling.—Alice Jane Duff, Christina McLeod, Viola A. J. Fjeldstad, Catherine Somers, Jessie Macleod, Catherine Melville, Jane Havlin, Janet Kilpatrick, John MacDonald, James Kerr.
Carlow.—Mary Fitzpatrick, William Hayden, Mary Doyle.
Portrane.—Annie Bourke, Mary Loughley.
Warwick County.—Julia Donagher, Emma Falkner, May Flaherty, Mary Jordan, Sarah Judge, Florence Lancaster, Florence Riley, Lilian B. Upton, Gertrude Vaughan.

FINAL, NOVEMBER, 1914.

- Bloemfontein, S.A.*—William C. Lamb, C. W. R. Z. Borstlap, J. S. van Rooven.
Fort Beaufort, S.A.—Robert Laidlaw.
Valkenberg, S.A.—Maline E. O'Driscoll.

- Devon County*.—Grace Edith Green.
Herts County.—Emily M. Weightman.
Three Counties, Hitchin.—Herbert S. Wilde.
Kent County, Maidstone.—Ada C. Westover, Lillie D. Byron, Florence A. Cook.
Leicester Boro'.—Lilian G. Ball.
Norfolk County.—Edith C. Good.
Oxford County.—Cyril M. N. Keen, George E. Newland.
Staffordshire, Cheddleton.—Agnete Moller, Geraldine B. Bowen.
Yorks, Scalebor.—Bernice Stead.
Yorks, Menston.—Lily Cawood, Agnes White (Distinction), Ellen Maughan, Violet Hunt, Gertrude Lambert, Maud Elsie Blunt.
Yorks, Wakefield.—Arthur Elstone.
Birmingham, Winson Green.—George E. Chatfield, Willam Lythall.
Birmingham, Rubery Hill.—Fred. G. Heathcote.
Derby Boro'.—John H. Widdowson, Alfred W. Potter, Eviline M. Murrell.
Leavesden.—Janet Davie.
Sunderland Boro'.—Emily Skipper.
Bootham Park.—Arthur C. Taylor.
Camberwell House.—Ena Gourlay (Distinction), Ethel H. Stannard (Distinction), Mary Ann Price, Florence Harding.
Fountain Temporary.—Annie Jones, Mabel Parker, Alfred T. Childs.
St. Andrews, Northampton.—Sidney G. Oakey.
St. Luke's.—Gertrude Fernihough.
Warneford, Oxford.—Jessie C. Allaway, Florence M. Phipps.
Retreat, York.—Hilda Thorpe.
Aberdeen Royal.—Edith Gordon Grant, Mary Anne Littlejohn, Margaret M. Beattie, Annabella T. Ironside, Williamina G. Thomson, Bathia Murison, Margaret J. S. Spalding.
Morningside, West House.—Laura Cross (Distinction), Jemima Reith, Eliza Simpson, Jessie Miller Thomson, John Morgan, Annie L. Sanderson, Jean C. Paterson.
Craig House.—Elizabeth S. Greig, Agnes M. M. Forrest, Grace G. B. Macrae, Joan Blyth.
Edinburgh District.—Sophie Scott, Jessie Gilroy Baillie, Helen E. MacLachlan.
Glasgow, Gartloch.—Susan Sime, Mary Bell, Helen Dobbie, Margaret B. Tinto, Minnie Howie.
Glasgow, Woodilee.—Mary Ann Graham, Jessie B. Howie, Ina Mackay, Mary Anne Cameron, Anna Wyse Caldecott, Charles W. Mackie, Mary Fletcher (Distinction), Elizabeth C. M. Mackenzie (Distinction).
Inverness District.—Gwendoline M. Everatt, Annie Nicholl.
Roxburgh District.—Jane Home (Distinction), Christina McIntyre (Distinction).
Stirling.—Agnes C. J. McCarten, Elizabeth D. Gilchrist.
Londonderry.—Andrew Baird.
Portrane.—Patrick Gargan, Hugh Young, Terence Lennon, Peter Kenny, Alice O'Connor, Annie Holden, Mary McKittrick, Bernard Short, David Roche.
Essex, Severalls.—William James Emms.
Warwick County.—Annie Huband, Ellen E. Long, Elizabeth Sheppard.

OBITUARY.

The death of Dr. Stuart, late Senior Assistant Medical Officer at the West Sussex Asylum, Chichester, at the early age of 39, occasioned the deepest regret amongst his friends, and indeed on the part of all who knew him. It was the result of an accident which occurred on February 23rd, when his motor bicycle collided with a motor car and he sustained a compound comminuted fracture of his right leg of a very serious nature, attended with much hæmorrhage and shock. Amputation was found necessary, but notwithstanding everything that care and skill could do for him he died within a few days, on March 9th, from exhaustion and shock.

Dr. Stuart had been junior assistant at Chichester for over seven years, and in

January last had been promoted to the post of senior on the appointment of his predecessor, Dr. Peachell, to the superintendency of the Isle of Wight Asylum. His chief, Dr. Kidd, had the highest opinion of his character and capabilities, and the following extract from an appreciative notice which appeared in *St. Mary's Hospital Gazette*, contributed by one who knew him best, is a tribute to his worth, and the esteem in which he was held :

"He was a splendid asylum medical officer, a good disciplinarian, ever kind and sympathetic and skilful in his treatment, and loved by the staff and patients, and by none more than his medical colleagues. His untimely end is a great loss and will be most keenly felt at Chichester, where he had worked so conscientiously for over seven years. He was a good all-round sportsman, and a particularly fine golfer. The funeral, which was largely attended, took place on March 12th, the first part of the service being held in the Asylum Chapel, and the interment at the Chichester Cemetery."

MEMBERS OF THE ASSOCIATION, AND ASYLUM MEDICAL OFFICERS, SERVING IN H.M. FORCES.

MEMBERS of asylum staffs throughout the kingdom have not been backward in coming to their country's aid in her hour of peril. Quite a large number of attendants have volunteered for the combatant ranks, and many asylum medical officers have placed their services at the disposal of the R.A.M.C. department. Of these latter the subjoined list gives all the names which up to this have been communicated to the Editors, but there is reason to believe that there are many which are not here included, and the Editors will be glad to receive for insertion the names of any others who have joined the Services, or who may do so before the publication of the July number of the Journal. Some, alas, have already terminated their careers on the field of battle. Their names are added to the Roll of Honour, that sad but glorious record of noble hearts, who, in the noblest of causes, "loved not their lives unto the death." We are proud of their actions, while we mourn their loss.

Dr. Crowther. Killed in action, 1914.

Lt. P. M. J. Power, R.A.M.C. Killed in action.

Surgeon G. M. Graham, R.N.

Dr. Keith W. Brooks, R.A.M.C.

Dr. Cahir, R.A.M.C.

Dr. L. F. Hanbury, Medical Superintendent, West Ham Borough Asylum, 1st Sportsman's Battalion, London Fusiliers.

Dr. W. H. Hill, R.A.M.C. Prisoner of war.

Dr. A. Nobbs, R.A.M.C.

Dr. O. P. Napier Pearn, Assistant Medical Officer, London County Asylum, Horton.

Dr. M. Mann Rodger, Second Assistant Medical Officer, Cardiff Mental Hospital.

Dr. Ryan, R.A.M.C.

Dr. Shand, R.A.M.C.

NOTICES BY THE REGISTRAR.

Certificate in Psychological Medicine and Gaskell Prize.—Examination during first week in July.

Last day for receiving *Essays for Bronze Medal*, June 14th.

REGULATIONS FOR DIVISIONAL PRIZES.

1. Two prizes, of £10 and £5 respectively, shall be awarded annually by the Association (provided sufficient merit be shown) for the best paper read during the preceding calendar year at a divisional meeting by an Assistant Medical Officer.

2. Every Assistant Medical Officer of any asylum or institution for the insane being a member of the Association shall be eligible to compete, but—

3. A prize shall not be awarded more than once to the same individual.

4. Only papers handed in to the secretary of the division at the meeting at which they are read will be eligible to be considered in competition.

5. The papers shall be adjudicated on by the President of the Association, together with an assessor or assessors to be appointed by him should he see fit.

6. The results shall be announced, and the prizes awarded, if any, by the President at the annual meeting in each year.

First award in July, 1913, for papers read during the year 1912.

Nursing Certificate.—The next examinations will be held on following dates:

Preliminary	Monday, May 3rd.
Final	Monday, May 10th.

NOTICES OF MEETINGS.

Quarterly Meeting.—Tuesday, May 18th, at London.

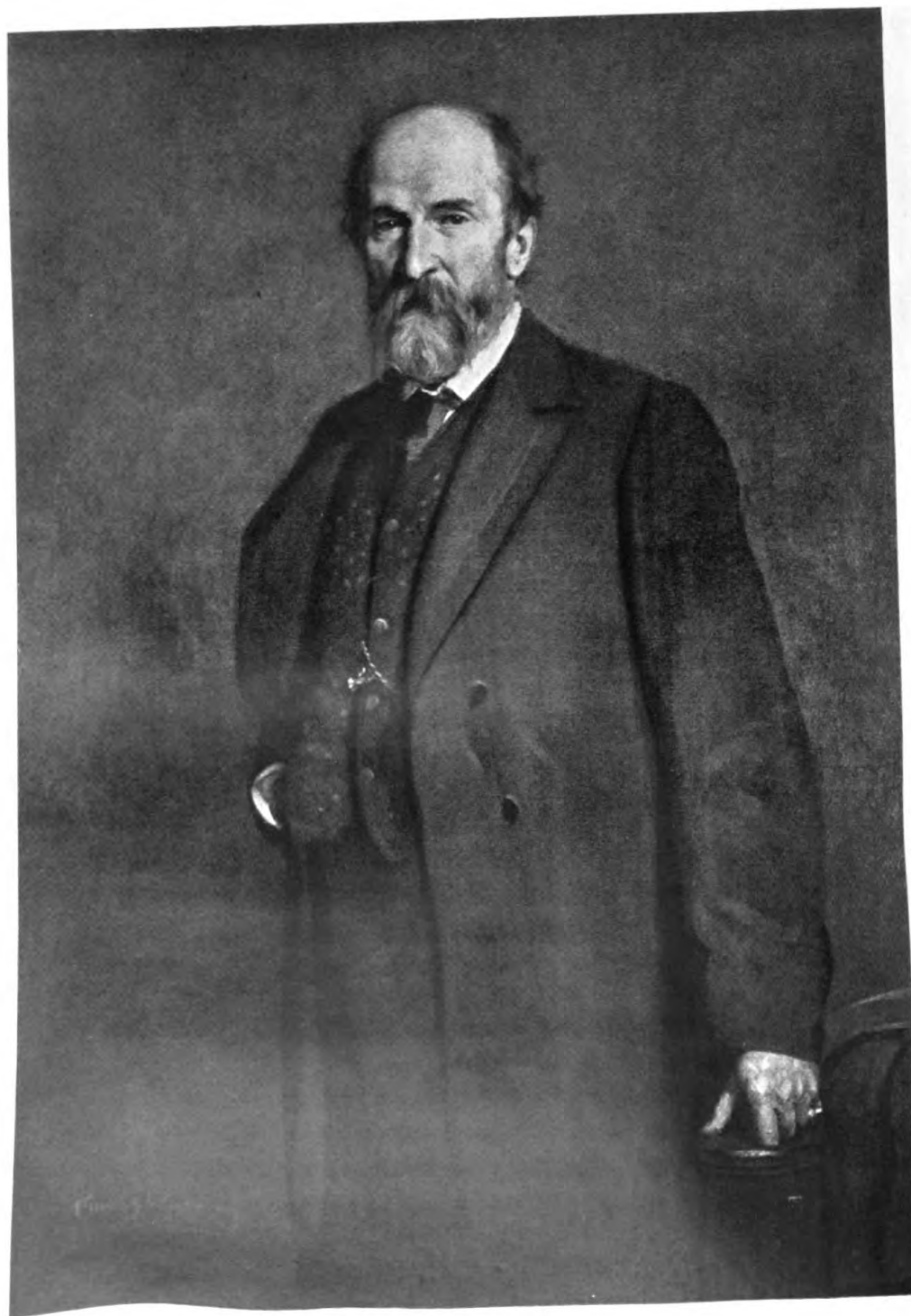
Irish Division.—Thursday, April 15th, at Hampstead, Glasnevin. (Dr. Eustace.)

Annual Meeting.—Thursday and Friday, July 22nd and 23rd, at Edinburgh.

APPOINTMENTS.

Middlemiss, J. E., M.R.C.S., L.R.C.P., Medical Officer to the Leeds Committee for the Care of the Mentally Defective.

Porter Phillips, J. G., M.D., B.S., M.R.C.P.Lond., Lecturer in Mental Pathology to the London (Royal Free Hospital) School of Medicine for Women (date from November, 1914).



SIR THOMAS SMITH CLOUSTON, M.D., LL.D.

Obiit April 19th, 1915.

Adlard & Son, Impr.

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VOL. LXI.

Part I.—Original Articles.

Sir Thomas Smith Clouston, M.D., LL.D.

THE medical profession, through its leading journals, has paid respectful tributes to the memory of Sir Thomas Clouston—tributes which indicate, among other things, that he was regarded as more than a mere specialist, and as deserving of a place among those whom the profession considers worthy of honour. This distinction is eminently fitting, for his life's work was devoted to the purpose of identifying his specialty with the general scope of medical science and practice.

To us, among whom he laboured for over half a century, he was more intimately known, and his loss is as much a personal as a public one. He filled the presidential chair of the Association, was an editor of the Journal, always a valuable counsellor in our deliberations, but, above all, he held our honour as his own. Many a member of the Association has confided difficulties to him and received the benefit of his advice.

Thomas Smith Clouston was born in Orkney seventy-five years ago. He continued throughout his life in

close touch with the people and place of his birth. In doing so, apart from natural inclination, he showed his wisdom, for men, like plants, most easily derive sustenance from their native soil. Scotsmen are proverbially clannish, but, although he was a good Scot, he was an Orcadian first. The peoples of the northern islands, though of mixed descent, claim Scandinavian origin, and to this day it is common to hear the natives of Orkney speak of the "Scotch," or of going to "Scotland." Clouston never lost this sentiment, or the pardonable pride in a Viking ancestry.

After receiving the rudiments of a scholastic education at Aberdeen, he entered the University of Edinburgh as a medical student when still a mere boy. He showed great aptitude and originality as a student, and his inclinations turned early to the subject of neurology. This inclination may be observed in his thesis for the M.D. degree, for which he selected the nervous system of the lobster. It is not possible to account for motives of this kind in young men, but among the many distinguished teachers then in the Edinburgh School, Laycock was not the least prominent. He was a voluminous writer, a philosophical thinker, and a man of immense erudition. In addition to his lectures on medicine, he lectured on medical psychology to a limited but thoughtful class of students. That he influenced Clouston's career in life and his modes of thought is undoubted, for many of Laycock's views reappear persistently in Clouston's writings. To give one example, Clouston preached and taught that periodicity in the appearance and recurrence of mental diseases was intimately connected with the periodicity of Nature. This, obviously, was the teaching of Laycock, as set forth in his well-known essay on the "Development of a General Law of Periodicity." From Laycock's hands he passed to those of another man who exercised a potent influence on all his assistants—Dr. David Skae, Medical Superintendent of the

Royal Edinburgh Asylum. Skae's place in the specialty is not easy to fix, for it was conditioned more by an influence than by permanent records. His personality was vivifying; he was fertile in ideas, broad in his conceptions, and contemporary opinion regarded him as a man very much above the average. Associated with Clouston as residents at Morningside were the late Sir John Sibbald and Dr. David Yellowlees.

Such was his early training preparatory to the real work of his life, which began in 1863, when he was appointed Medical Superintendent of the Cumberland and Westmorland Asylum, Carlisle, at the unusually early age of twenty-three years. His ten years' work at Carlisle were full and strenuous years, occupied in administrative detail, and marked by a multiplicity of clinical observations, most of which were published. The value of his medical work during this period can scarcely be judged by present day standards, for the modern exponents of psychiatry would appear to have acquired a pseudo-pentecostal gift of tongues, confusing to one another, and bewildering to everybody else. When they return to simplicity again, as they assuredly will, no small benefit will result to the specialty, and many of the older writers will receive the recognition they are entitled to.

It was at Carlisle that Clouston acquired the experience of asylum administration which he put into practical use at Morningside when he returned there in succession to Skae, in 1873. The keynote of his policy was the predominance of the medical idea in administration. Now this is an elusive and somewhat slippery standpoint—not always easy to maintain against the tendencies which make for under-estimation on the one hand, or exaggeration on the other. Clouston never had any doubts on the subject, and consequently no difficulties. He kept the flag flying high, and it is safe to say that he was one of the

most shining examples of the justification of the medical management of institutions for the insane. He was little influenced by custom or precedent or fashion in administration, and in comparison to the medical needs of his patients everything else became subsidiary. If a man is possessed of a right principle of this kind, as well as of the requisite character and purpose to give it effect, the results are, as in this instance, fruitful and edifying. No doubt he had opportunities and stimuli which only asylum physicians attached to large medical schools possess, but he grasped them with the conscious ardour of a pioneer. When he succeeded Skae at Morningside the latter had commenced his famous Morrison lectures on the *Classification of Insanity*, and Clouston first identified himself loyally with the views of his former chief, and then completed the course as he believed Skae would have done had he lived. The somatic classification of insanity, and the controversy it occasioned more than forty years ago, have both faded into obscurity, but when we have passed into regions of greater certainty and calmer reflection, the undoubted influence of physiological and pathological somatic states upon the origin and course of mental diseases will again come into substantial prominence, though not in the form which Skae and Clouston conceived. Form changes, substance remains, and no thoughtful alienist doubts the intrinsic truth underlying Skae's theory.

Although a formal lectureship on mental diseases was not established in the University of Edinburgh until 1879, Clouston followed Skae's practice of lecturing to such students as voluntarily chose to attend the course. From the outset his lectures were deservedly popular, and in this capacity he found an outlet for his talents. By nature a teacher, he threw a glamour over the subject which left a lasting impression on his students. He used the lecturer's chair for the prosecution of a propaganda, the object of which

was the elevation of psychiatry into an honourable place in the medical curriculum, and the dispersion of the prejudice and scepticism which had previously militated against its adequate recognition. What Clouston really aimed at was the establishment of an atmosphere in which no more stigma should attach in the public mind to the incidence of an attack of mania than to an attack of measles, and to that end he set himself to instil his views into the medical mind, and through it to influence the public. Hence the popular strain in which his well-known text-book was written, and hence his efforts to adapt asylums and their administration to medical conceptions of the treatment of disease. In so doing he was not led into optimistic views of the cure of the more chronic forms of insanity, but he held strongly the opinion that for the proper care of all classes of the insane medical supervision and administration were essential. His writings were numerous, but of them all the *Clinical Lectures on Mental Diseases* was from every point of view the most successful. Again we have to apologise for its comparative simplicity, though simplicity of expression has been a characteristic of all great medical classics. It is not pretended that this was a classic work; Clouston himself would have been the last to make such a claim, but it contained a description of adolescent insanity which is undoubtedly classic, and with which Clouston's name will ever be associated. Moreover, it presented for the first time in English psychiatric literature certain clinical pictures of insanity of so masterly a character as to entitle their author to a foremost place among contemporary alienists.

The man himself was many-sided. In professional work he was punctilious in the performance of duties which many lesser men find irksome, but his versatile personality supplied the quality which redeemed the veriest routine from monotony and futility. In addition he manifested, at his best, magnificent courage which

ensured, when occasion demanded it, the frank acknowledgment of his own faults, which scorned all subterfuge, and which entailed the sharp exposure of the shortcomings of his subordinates. No man could take a broader view of the frailties of human nature, but he never allowed these sentiments to interfere with discipline or degenerate into laxity in his professional or business relations with his fellow men. To his assistants he was always loyal, and it is safe to say that, considering their number, they remained through life extraordinarily attached to him. In private life his intimate friends were not numerous, but those admitted to his friendship generally continued in it. There was that aloofness of disposition often characteristic of greater minds which repelled mere acquaintances rather than attracted them within the sphere of intimate friendship. While he was no ascetic, but participated freely in the pleasures and festivities of his fellows, his high moral ideals and an intense desire to benefit others led him to devote the later years of his life to delivering numerous lectures, and writing such popular books as *The Hygiene of Mind*, and *Unsoundness of Mind*, both of which were well received by the public.

He enjoyed, deservedly, a large share of public confidence and, what is a surer test of worth, the confidence of his professional brethren throughout the English-speaking world. That he was made the recipient of those civic and academic honours which the State and learned bodies confer upon worthy citizens was but the outward stamp of the appreciation of a long and useful career.

This notice would not be complete without a reference to his domestic life. He was fortunate in his marriage, the fiftieth anniversary of which was celebrated last year, and at which his children and his children's children were present. Lady Clouston, who survives him, was ever a helpful consort, in some respects a complement, in others a sharer of his burdens.

The Study of Character by the Dramatists and Novelists.

By F. W. MOTT, M.D.Lond., LL.D.Edin., F.R.S., Pathologist to the London County Asylums.

NEARLY twenty years have elapsed since Mr. Shand published in *Mind* an article entitled "Character and Emotions"; in this he formulated the hypothesis that the sentiments are complex derivatives of the primitive emotions. Thus, in the analysis of love and hatred he showed that "the same four emotional dispositions of fear, anger, joy, and sorrow, which are essential to the system of love, are present also in the system of hate." Many eminent psychologists have adopted, or partially adopted, his views, among whom may be mentioned Professors Stout, McDougall, Westermarck, Sully, Caldecott, and Boyce Gibson. A great feature of this interesting work⁽¹⁾ is its literary merit, and the infinite care and skill displayed by the author in his study of the emotions and tempers by an analysis of the characters portrayed by the great dramatists, poets, and novelists. Mr. Shand recognises the fact that the success of the dramatist and novelist depends upon the study of individual characters, and he gives numerous examples which we shall refer to later, but we will first call attention to two quotations which appear opposite the title page. "And this subject of the different characters of dispositions is one of those things wherein the common discourse of man is wiser than books, a thing which seldom happens. Wherefore, out of these materials (which are surely rich and abundant) let a full and careful treatise be constructed, so that an artificial and accurate dissection may be made of men's minds and natures, and the secret disposition of each particular man laid open, that from a knowledge of the whole the precepts concerning the cures of the mind may be more rightly formed. And not only the characters of dispositions impressed by nature should be received into this treatise, but age, country, state of health, make of body, etc. And, again, those which proceed from fortune, as in princes, nobles, common people, the rich, the poor, magistrates, the ignorant, the happy, the miserable," etc. —Francis Bacon, *De Augmentis Scientiarum*, B. vii, Ch. iii.

(1) *The Foundations of Character*, by Alex. F. Shand, M.A. Macmillan & Co., Ltd., 1914. Net price, 12s.

"Ethology is still to be created. But its creation has at length become practicable. The empirical laws destined to verify its deductions have been formed in every successive age of humanity, and the premises for the deductions are now sufficiently complete."—J. S. Mill, *A System of Logic*, B. vi, Ch. v, 6.

It is with regard to the former quotation we are more particularly interested, for, it may be asked, where can this full and careful treatise wherein "the common discourse of man is wiser than books" be found, in which "men's minds and natures and the secret disposition of each particular man are laid open"? Wm. Smedley, in his most interesting work *The Mystery of Francis Bacon*, p. 185, says: "One cannot without feeling deep regret recognise that we have to turn to a foreigner to give reasons for the faith which we have in Shakespeare. It was a German, Schlegel, who discovered our great dramatist, and to-day we must turn to his lectures on the drama for the most penetrating description of his plays. The following is a translation of a passage which, in describing the plays, almost adopts the words Bacon uses in the foregoing passage as to the scope and object of the fourth part of his *Great Instauration*: "Never, perhaps, was there so comprehensive a talent for the delineation of Character as Shakespeare's. It not only groups the diversities of rank, sex, and age, down to the dawns of infancy; not only do the king and the beggar, the hero and the pickpocket, the sage and the idiot speak with equal truth; not only does he transport himself to distant ages and foreign nations, and portray in the most accurate manner, with only a few apparent violations of custom, the spirit of the ancient Roman, of the French in their wars with the English, of the English themselves during a great part of their history, of the Southern Europeans (in the serious part of many comedies), the cultivated society of that time, and the former rude and barbarous state of the north; his human characters have not only such depth and precision that they cannot be arranged under classes, and are inexhaustible even in conception. No, this Prometheus not merely forms men, he opens the gate of the magical world of spirits, calls up the midnight ghost, exhibits before us his witches amidst their unhallowed mysteries, peoples the air with sportive fancies or sylphs, and these beings, existing only in imagination, possess such truth

and consistency that even upon depraved monsters like Caliban he extorts the conviction that if there should be such things they would so conduct themselves. In a word, he carries with him the most fruitful and daring fancy into the kingdom of Nature ; on the other hand, he carries Nature into the regions of fancy, lying beyond the confines of reality. We are lost in astonishment at seeing the extraordinary, the wonderful, and the unheard of in such intimate nearness."

"If Shakespeare deserves our admiration for his characters, he is equally deserving of it for his exhibition of passions, taking this word in its widest signification as including every mental condition, every tone from indifference or positive mirth to the wildest rage and despair. He gives us the history of minds, he lays open to us in a single word a whole series of preceding conditions. His passions do not at first stand displayed to us in all their height, as in the case with so many tragic poets, who in the language of Lessing are thorough masters of the legal style of love. He paints in a most inimitable manner the gradual progress from the first origin. He gives us, as Lessing says, 'a living picture of all the most minute and secret artifices by which a feeling steals into our souls, of all the imperceptible advantages which it there gains, of all the other stratagems by which every other passion is made subservient to it, till it becomes the sole tyrant of our desires.' Of all poets, perhaps, he alone has portrayed the mental diseases, melancholy, deliriums, lunacy, with such inexpressible and in every respect definite truth, that the physician may enrich his observations from them in the same manner as from real cases."

Certainly this vivid description of the Shakespearean drama by Schlegel accords, as Smedley asserts, with the full and careful treatise advocated by Bacon. Moreover, in support of the Baconian theory, Smedley points out that Bacon, after making the pronouncement already quoted from *De Augmentis*, goes on to say : "The knowledge touching the affections and perturbations which are the diseases of the mind, where we find painted forth with great life and dissected how affections are kindled and excited, and how pacified and restrained, and how again contained from act and further degree, how they disclose themselves though repressed and concealed, how they work, how they vary, how they are enwrapped one within another, and

more particulars of this kind ; amongst which this last is of use in moral and civil matters ; how I say to set affection against affection, to use the aid of one to master another," etc.

It will thus be seen that the philosophy of Bacon, his knowledge, vast experience, and wisdom would have enabled him to be the leading spirit in the construction of the Shakespearean drama, yet his style is quite unlike that of the plays of Shakespeare. Baconians, however, assert that Spedding, in his life of Francis Bacon, omits to mention a letter of Sir Toby Matthew to Bacon, in which he refers to him as being the greatest wit the world has ever known, although under another name. Certainly Bacon translated the Psalms, and probably had much to do with the translation of the Bible. "Mente videbor" ("By the mind I shall be seen") was his motto, and he certainly placed the study of man's mind and character above all other inquiries. It is not our intention, however, to discuss the vexed question, Was Bacon Shakespeare? but to point out that, inasmuch as the foundations of character are revealed by the conduct of human beings, and as Bacon says the subject of the different dispositions is one of those things wherein "the common discourse of men is wiser than books," it is the great novelists and dramatists who have studied the common discourse of men, and "also have painted forth with great life and dissected how affections are kindled and excited, and how pacified and restrained," etc. Consequently the psychologist who studies characters by "thinking on thinking and not thinking on things" does not know or understand the realities of life. The novelist or the dramatist to be successful must have observed and studied the motives and conduct of all ranks of society of both sexes, and their interaction, so that they may breathe such life and action into their character that, for the time being, the reader's mind is transported to the scenes and actions which their language portrays with such reality that he feels as if he were acting the part, or responding by an echo of his emotions and sentiments. We therefore who have to deal with human affairs and the conduct of men welcome a book by a psychologist who relies upon the great students of character, the novelist and dramatist, to support his views.

We will now consider some of the illustrations of character Mr. Shand has taken from the dramatists and novelists. Mr. Shand gives an interesting sketch of the miser in Balzac's

novel, *Eugénie Grandet*, in which the old miser Grandet makes all other members of his household, including his wife, to whom he shows little or no affection, participate in his passion by industry, meanness, and parsimony, yet the novelist makes him show a genuine affection for his only child Eugénie. The miser of Molière's *L'Avare* is essentially the same type of character, except that the passion for wealth has become the sole tyrant of his desires ; for he even suspects his children of robbing him. The dramatist and novelist not only portray the character of human beings, but they dissect men's minds, and lay open the secret dispositions of particular men, by expressing in broad or subtle language their silent thoughts, suffused with those suppressed passions which have their source in the sexual life. Mr. Shand, in support of his law "Of the tendency of sorrow to break the spirit," quotes two remarkable passages from the Russian novelists. Tourgueneff, in *L'abandonné*, gives a girl's description of herself after abandonment by her lover, and Dostoievsky, in *L'Esprit Souterrain*, has also described the effect of the frustration of sexual love on a weak but ardent character.

His chapter on sorrow is extremely interesting, because it shows in a marked manner the wide literary scope of the author ; to take one of many examples of quotations from various authors Mr. Shand quotes the following passage from Seneca : "The consolation to a humble man in trouble when he sees that the greatest are subject to reverses of fortune, and a man weeps more calmly over his dead son in the corner of his hovel, if he sees a piteous funeral proceed out of the palace." Yet, as Mr. Shand says, this consolation is not therefore unkindly, but often is accompanied with sympathy and pity so well expressed in the following lines from *King Lear* :

"When we our betters see bearing our woes,
We scarcely think our miseries our foes.
Who alone suffers, suffers most i' the mind,
Leaving free things, and happy shows, behind ;
But then the mind much sufferance doth o'erskip,
When grief hath mates, and bearing fellowship.
How light and portable my pain seems now,
When that which makes me bend makes the king bow."
— *Shakespeare (King Lear)*.

Chapter IX, on the relative ethics of the sentiments, is very interesting at the present time. Mr. Shand says: "Thus, too, when one nation hates another it feels itself justified in destroying even that noble part of the hostile nation which is ready to sacrifice life in its defence. Hate, so far from developing, like love, a relative ethics of its own, tends to destroy all virtues, ideals, and duties that restrain it from its ends." Shylock asks: "Hates any man the thing he would not kill?" In his analysis of hatred the author expresses the opinion that "with the progress of civilisation hatred is becoming rarer; the knowledge of foreign countries, and their abandonment of aggressive policies, have diminished the hatred of foreigners." We had not yet learnt what German "Kultur" meant; the hymn of hate had not been written; and school-children had not been taught to greet their teacher by "Gott strafe England." Certainly England has, in a measure, restrained Germany from the fulfilment of its ends. Very much more might be said, but it will suffice if a brief reference is made to the distinction Mr. Shand makes between the relative ethics of sentiment and the conscience, of the laws of their interaction, and how much conscience itself may be enriched and enlightened by the obligations which love obliges us to recognise. "But were conscience destroyed in any one of us, as it is partially destroyed when we deliberately persist in a mode of living in contempt of its laws, something analogous would tend to spring up spontaneously in every genuine sentiment of love when it had reached the stage at which its further progress was dependent on effort and deliberation." Hence, Mr. Shand says we are now able to understand the profound reflection of Shakespeare:

"Love is too young to know what conscience is;
Yet who knows not, conscience is born of love?"

—*Sonnets*, 151.

These lines reveal not only Shakespeare's extraordinary insight into the foundations of character, but his power of language in exciting emotional interest and expressing in a few well-chosen words a whole philosophy.

Meningo-vascular Syphilis associated with a Retro-olivary Syndrome. By R. M. STEWART, M.B., Ch.B.Edin., Pathologist and Assistant Medical Officer, County Asylum, Prestwich.

ALTHOUGH modern research has placed the treatment of syphilis on a scientific basis, the *Treponema pallidum* continues to exact a heavy toll among all classes of society. The seriousness of the disease is largely due to the ever-present risk of a return of symptoms, perhaps many years after the acquirement of infection, and to the frequency with which the central nervous system is attacked.

Although it is a generally accepted fact that mental derangement is not infrequently associated with syphilitic infection, it is a problem of great difficulty to determine exactly what percentage of the insane owe their mental disorder to the direct effect of the syphilitic virus.

It is necessary to recognise that with a disease so prevalent among the general population, coincidence as well as cause must be of frequent occurrence.

In asylums, dementia paralytica stands first as the most frequent mental disorder resulting from syphilis, accounting for 2·4 *per cent.* of the total number of patients admitted to care. Since we now know that it is an active inflammatory process, showing no fundamental pathological difference from chronic syphilis of the nervous system, it has become necessary to adopt a new classification.

Dementia paralytica and tabes dorsalis are now termed chronic parenchymatous syphilis, or syphilis centralis, while those lesions of the tertiary period, which we were accustomed to variously term cerebral syphilis, gummatous meningitis, etc., are referred to as chronic interstitial or meningo-vascular syphilis.

These two classes are intimately related to each other. "Parasyphilis" is regarded as a tertiary syphilitic process resulting from a diffuse distribution of spirochaetes within the nervous tissues, while cerebral syphilis is the manifestation of an inflammation limited to, and located in, the interstitial tissues.

It is also recognised that since there is no sharp line between

them these lesions may be mixed ; a brain may show both interstitial and parenchymatous change. It is obvious that such cases during life may offer great difficulties in diagnosis, for there is no sign or symptom in dementia paralytica which cannot be present in a case of subacute meningo-vascular syphilis, and, unless one has recourse to the Wassermann reaction and persistent treatment, it may be impossible to say with certainty whether or no the lesion is entirely parenchymatous.

For the diagnosis of general paralysis of the insane reliance is chiefly put on the clinical history and naked-eye appearances of the nervous system after death, and in typical cases there is usually no difficulty in coming to a decision, but in acute or early cases terminating prematurely by intercurrent disease it may be impossible, in the almost complete absence of cortical wasting and lepto-meningitis, to say that the case was one of parenchymatous syphilis. Again, the pathologist may be misled by the presence of gross vascular lesions indicative of cerebro-spinal syphilis, which could be shown on microscopic examination to be an accompaniment of syphilis centralis.

Unless, therefore, histological examination is carried out in every atypical case, there is some danger of the less experienced pathologist being misled by the macroscopic appearances.

It is assumed that the relatively wide-spread parenchymatous encephalitis is brought about by the presence in the general paralytic brain of spirochætes, in no matter how small a number, owing to an altered susceptibility of the tissues to the virus ; hence the structural changes are characterised by diffuseness, and lesions may be found in every part of the nervous system.

While in cerebral syphilis the lesions are usually less widely disseminated, cases may sometimes be found in which the interstitial and vascular changes are extremely wide-spread and severe, leading to a secondary parenchymatous degeneration rivalling that found in dementia paralytica. Large territories of the hemispheres may have their blood-supply completely cut off, and extensive softenings result.

Several remarkable cases are mentioned by Clouston in which the white matter of the cerebrum had almost exclusively suffered in this way, leaving the grey matter intact.

Similar changes were found in the present case, which in its morbid anatomy affords a striking example of the effects of

the syphilitic virus on the supporting, enclosing, and vascular structures of the central nervous system.

The case has an additional value in that the patient presented a retro-olivary syndrome dependent upon thrombosis of the posterior inferior cerebellar artery.

History.

P. P—, a female, æt. 47, was admitted to the County Asylum, Prestwich, on December 24th, 1912. She died on May 4th, 1914.

Her family and previous history contained little of importance. On her reception order it was stated : " She is very low-spirited and depressed. Has hallucinations of sight and hearing. Says she saw her son (who is in India) last night, and could hear his voice. Speaks in a rambling and incoherent manner."

Her physical state on admission was as follows : She was a tall, well-built woman, with white hair. She was anæmic, and in poor bodily condition. In the neighbourhood of her right knee-joint were some scars of an obviously syphilitic nature.

Physical examination revealed little of importance. Her pupils were equal, and reacted to light and on accommodation ; her tendon reflexes were normal. A photograph taken a few days after admission showed a well-marked ptosis on the left side, with over-action of the frontalis muscle.

Mentally she was deluded and excited : she thought people were following her about with the intention of injuring her.

She had auditory and visual hallucinations ; her speech was incoherent.

Subsequent history.—She remained hallucinatory, excited, and restless, and in the succeeding months her mental state showed a rapid deterioration. She became completely disorientated, restless, destructive, and faulty in her habits.

In November, 1913, she had a slight convulsion affecting the left side of her face and right upper extremity. From this date onwards she had frequent slight seizures, with twitching of the left side of her face. She complained of failure of vision in her left eye. She was very resistive, and showed marked slurring speech and facial tremor.

By February, 1914, she was completely bedridden. She now showed a profound disturbance of memory, being quite unable

to recollect events which had taken place a few hours previous to her cross-examination.

On May 2nd, 1914, she had a convulsion, and died two days later with symptoms of acute bulbar paralysis.

She was able to give valuable information with regard to cutaneous sensibility, and finally expressed the opinion that she was dying.

Reviewing her mental symptoms, we see that they comprised delusions of persecution, emotional irritability, visual and auditory hallucinations, disorientation, and nocturnal restlessness. Outbursts of excitement and aggression were frequent. She became destructive and dirty in her habits. A feature of importance among these mental symptoms was the preservation of her autocritical faculty—the consciousness of her own mental deficiency. When one adds to this the accompanying obtrusive bodily paralysis, we have a clinical picture fairly characteristic of diffuse cerebral syphilis.

In view of the pathological findings, the following description of the physical signs a few days prior to death is of considerable interest.

On May 2nd, the day on which she had her last convulsion, complete paralysis of the left side of her face and unilateral paralysis of the palate were noted.

On May 3rd I had an opportunity of seeing the patient at 6 p.m. She was confined to bed, and, although apprehensive and resistive, was able to reply intelligently to questions. Indeed her answers were remarkably precise.

She had been unable to swallow since the previous day, and was tube fed in the evening. Some difficulty was experienced in passing the œsophageal tube, which increased her difficulty in breathing, owing to the presence of a large quantity of mucus in the pharynx which she was quite unable to swallow. In her attempts to resist the passage of the tube she bit the operator's finger, and it is worth noting that she had sufficient intelligence to apologise for having done so. The nasal tube was then substituted, and passed without difficulty. Her palate was completely paralysed, and showed no movement on phonation, which was weak and defective. A striking feature was the way in which her nasal articulation improved when she lay with her head thrown back.

On account of the continuous flow of mucus and saliva a

laryngeal examination could not be made, nor was it possible to test her sense of taste. Her tongue protruded straight, and showed neither tremor nor atrophy. There was marked paralysis on the left side of her face. On testing her visual fields she stated that she could not see with her left eye, but she could certainly count fingers. The visual axes were parallel.

She had no difficulty in hearing, and there was no nystagmus.

Apart from left-sided ptosis, there appeared to be no other cranial nerve abnormality.

Evidence of paralysis of the ocular sympathetic was present. The left pupil was smaller than the right, and while showing no dilatation on shading the eye, contracted to light and on convergence. In addition, recession of the globe was noted.

There appeared to be no loss of motor power and no incoordination. The grasp of each hand seemed normal. The masseter muscles contracted well, a fact which was very evident when the œsophageal tube was being introduced.

Sensation : Pain.—This was tested with a pin. She showed a complete analgesia of the left face, right limbs and trunk. With regard to the right side of the face, I was unable to satisfy myself that analgesia was present there as well, but there certainly seemed to be some diminution of sensibility to pain. Firm pressure on the right ulnar nerve failed to evoke any disagreeable sensation. The normal sensitiveness was preserved on the left side.

Touch.—Tactile sensation seemed everywhere normal. Repeated examination failed to elicit any conflicting answers. Localisation of the stimuli was correct.

Temperature.—This was tested by the application of two spoons, one of which was warmed. There was a complete loss over an area which appeared to correspond to that of the analgesia, *i.e.* the left side of the face, right upper and lower extremities, and right half of the trunk. On May 4th she was tube fed in the morning and again at 5 p.m. On the latter occasion she stated that she was dying; this was her last utterance.

At 8 p.m., when I saw her, she was unconscious, and lay on her back with her legs and thighs partially flexed. Her temperature was 102° F., pulse-rate 130, and respirations 60.

She was considerably cyanosed; the right side of her face was bathed in perspiration, while the left side was quite dry,

Her cheeks were flapping loosely with respiration, and her mouth could not be opened, owing to spasm of her masseters.

The right corneal reflex was present ; on the left side it was abolished. She groaned when the right side of her face was pricked, but painful stimulation on the left side elicited no response.

The right pupil was dilated ; the left moderately contracted. Both contracted slightly on bright illumination. The instillation of epinine produced wide dilatation of the left pupil.

Motor power.—Her thoracic muscles appeared completely paralysed. The thorax showed no expansion, respiration being carried on entirely by the diaphragm. Estimation of motor power in her limbs was difficult, but neither leg fell in the "dead" manner characteristic of paralysed limbs. The plantar reflexes were of the extensor type ; on both sides Gordon's paradoxical reflex was present, and Oppenheim's reflex could be obtained on the left side. The abdominal reflexes were absent. Her knee-jerks were slightly exaggerated. Her sphincters were relaxed. An ophthalmoscopic examination was made. Beyond fullness of the veins no abnormality could be detected.

The patient died at 10.50 p.m.

Autopsy.

A *post-mortem* examination was made twelve hours after death.

The heart showed hypertrophy of the left ventricle, and fatty degeneration of the myocardium ; there was no valvular lesion. Atheromatous patches were present at the root and on the arch of the aorta. They had the appearance of soft, flattened, yellowish plaques on the inner wall of the vessel.

Similar changes of a more diffuse nature were found in the carotid arteries. The respiratory passages were much congested and contained frothy mucus. Both lungs showed a condition of hypostatic pneumonia. The liver was slightly enlarged, and showed fatty degeneration. The kidneys were reduced in size, and showed cortical atrophy and irregularity. The other organs presented no noteworthy change.

Macroscopical Examination of the Nervous System.

The dura mater was slightly thickened and adherent to the calvarium in several places. The pia-arachnoid was congested, and showed slight thickening in areas to be presently noted.

The cerebral arteries were tortuous and very atheromatous, notably those forming the circle of Willis. The brain weighed 1180 grammes.

Right cerebral hemisphere.—The pia-arachnoid was slightly milky and thickened along the sulci of the frontal lobe, which were a little widened. It was nowhere adherent. The convolution pattern was of a normal type, and the degree of frontal wasting slight. A sharply localised cortical area of softening about 1 cm. in diameter was found on the posterior aspect of the occipital lobe. The arteries, as previously noted, were extremely atheromatous.

The hemisphere was cut across in Marie's plane. A softening of recent origin was found in the head of the caudate nucleus, at a point where this body appears in the lateral ventricle. A second horizontal section made in a lower plane parallel to the first revealed another softening involving the lowest part of the lenticular nucleus, in practically the whole of its extent.

The most striking object, however, was the presence of a remarkable cavitation in the white matter of the occipital lobe. Its clean, sharply-defined margins gave it an appearance totally distinct from that usually assumed by softenings of vascular origin.

Its shape was determined by the form of the occipital convolutions, from the grey matter of which it was only separated by a thin stratum of white matter. Its upper limit reached the posterior end of the angular gyrus, while its floor was on a level with the roof of the posterior horn of the lateral ventricle, behind which it lay. Total depth 2.5 cm. A second much smaller slit-like cavity was found in the white matter immediately subjacent to the middle of the ascending parietal convolution. It had a vertical depth of .5 cm. The walls of these cavities were rough and irregular, and no granular detritus was present.

Left cerebral hemisphere.—The external appearance resembled those of the opposite side. In making a horizontal section in Marie's plane a small area of softening was seen at a point where the anterior commissure takes a downward curve in the substance of the lenticular nucleus. It was of very small vertical extent.

Placed in the centrum ovale were two irregularly-shaped

cavities of appearance similar to that in the other hemisphere. The larger had a depth of 4 cm. extending downwards and outwards from the upper third of the post-central convolution ; its lower segment lay immediately beneath the outer segment of the lenticular nucleus. At the level of the corpus callosum it narrowed considerably, being divided into two separate loculi. At its widest part the cavity was roughly diamond shape, and here the first evidence of the second cavity was seen, lying posterior to the other among the fibres of the *forceps major*. It had less than half the vertical depth of the other, and commenced as an elliptical area lying between the convolutions forming the upper part of the parietal lobe.

Cerebellum.—A small cortical softening about 1 cm. in diameter was found, situated near the medial boundary of the *lobus inferior posterior*.

On making a horizontal section so as to expose the cerebellar nuclei, small areas of softening were discovered in the hilum of each dentate nucleus. On the left side the condition extended through a vertical depth of 1 cm.

Pons and medulla.—Apart from slight pial opacity the morbid changes appeared limited to the arteries supplying the brain stem. The basilar artery was somewhat tortuous and increased in girth ; it showed several hard areas of calcareous atheroma, and felt much thickened. The left vertebral was larger than its fellow ; both shared in the vascular degeneration.

Only the left posterior inferior cerebellar artery could be identified ; that of the right side was apparently absent. The artery pursued a tortuous course backwards and slightly upwards towards the inferior surface of the cerebellum. It was grossly altered, being irregularly thickened, and having numerous atheromatous patches on its wall. On dividing the vessel naked-eye examination showed an obvious complete occlusion of the lumen. The coats were much thickened, and the thrombus appeared partially organised.

Practically the whole extent of the vessel has undergone thrombosis, and the vertebral arteries for a distance of 2 cm. from their point of union were filled with blood-clot. The lower half of the basilar artery was similarly affected.

Transverse sections were made through the olivary region of the medulla. The eye was at once caught by a remarkable

cavity lying wholly to the left of the median raphe. The right side appeared normal. The pyramid, olive, accessory olivary nuclei, and circumolivary fibres were easily identified, also the descending root of the trigeminal nerve, the fibres of the twelfth nerve, and the restiform body.

The median raphe, the lemniscus, and the posterior longitudinal bundle showed a convexity to the right.

On the left side the pyramid and olive appeared flattened from before backwards, the dorsal accessory olivary nucleus lying nearly 1 mm. more ventral than its fellow. Measured from side to side the olive was 2 mm. broader than the corresponding structure on the right. The lemniscus had completely escaped, about .5 mm. of healthy tissue intervening. A small pit could be seen in the hilum olivæ. Probably the apparent distortion of the right side of the medulla may have been in part dependent on the processes of fixation and hardening.

The margins of the cavity were sharply defined, and its walls steep and smooth. It extended in a caudal direction very nearly to the lower limit of the inferior olive. In the lower third of the olive it was pear-shaped, with its posterior limit in an almost straight line from the nucleus of the tenth nerve to a point 1 mm. behind the olive. Its outer angle reached almost to the margin of the medulla. Two minute softenings were seen in the restiform body, which appeared to be thrust slightly outwards and backwards.

The upper limit of the cavity was reached at a point a little above the junction of the middle and upper thirds of the olive. Here the softening was represented by a small spot about 1 mm. in diameter, lying dorsal to the olive. To the naked eye the pyramid and olive did not appear to be affected.

Total depth of cavity 8 mm. Greatest width 10 mm.

Microscopical Examination of the Nervous System.

Spinal cord.—Immediately after removal the cord was placed in formalin 10 per cent., small pieces having been taken from each region of the cord for alcohol fixation. After ten days the cord was transferred to a 2 per cent. solution of potassium bichromate.

The following staining methods were adopted: Wolters' modification of Weigert, Wolters' counterstained with Van

Giesen, Marchi's method, iron-haematoxylin, Boehmer's haematoxylin and eosin, Van Giesen's picro-fuchsin, toluidin blue, cresyl violet, Pappenheim's pyronin methyl green.

Cervical region: Nerve fibres.—The most striking feature is the complete disappearance of large numbers of fibres from all parts of the section. Sections stained with Wolters' method, when viewed with the naked eye or low power objective, appear pale and lack the characteristic dark blue colour imparted by the stain. At the periphery of the cord an area of sclerosis extends completely round (Fig. 1). In this one can distinguish the ghostly outline of myelin rings, greatly swollen and thinned. In addition to the marginal loss of fibres the posterior and lateral columns have especially suffered, there being a great increase in glial fibres (Figs. 2 and 3). The fibres immediately surrounding the grey matter are the least affected; Goll's column is more affected than the postero-external. Viewed with a higher power the myelin sheaths—especially those near the sclerosed area at the cord margin—show every gradation of change, from slight loss of myelin to complete disintegration. They are swollen, irregular in contour, and frequently represented by drops of myelin. Where fibres had been cut longitudinally tortuosity and varicose swelling of the sheath can be discerned.

The finer myelinated fibres of the grey matter have a very broken appearance, with beaded and poorly stained sheaths.

Marchi's method gives almost no additional evidence of degeneration. A few scattered degenerated fibres are found in the posterior columns. Near the area of annular sclerosis and in the root entry zones small granules and flakes of altered myelin can be seen. Some of these almost completely encircle swollen myelin sheaths. The appearances coincide with those described under the term "primary degeneration of the myelin sheath."

FIG. 1.—Transverse section of spinal cord, cervical region. ² Annular sclerosis. Wolters' modification of Weigert.

FIG. 2.—Same region under a higher power. Note the loss of fibres in the posterior columns.

FIG. 3.—Higher power view of Fig. 2, showing the marginal loss of fibres.

FIG. 4.—Spinal cord, mid-dorsal region. The pia mater is greatly thickened and shows cellular infiltration. 1. Pia mater. 2. Fibrillar neuroglia.

FIG. 5.—Small vessel of posterior nerve-root, cervical region. Infiltration with lymphocytes and plasma cells.

FIG. 6.—Posterior root ganglion D 12, right side. Chronic chromatolysis of nerve cells.

FIG. 1.



FIG. 2.



FIG. 3.



FIG. 4.

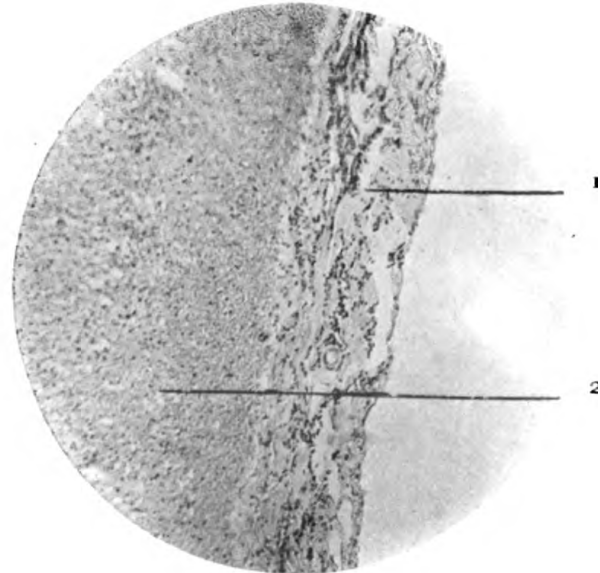


FIG. 5.

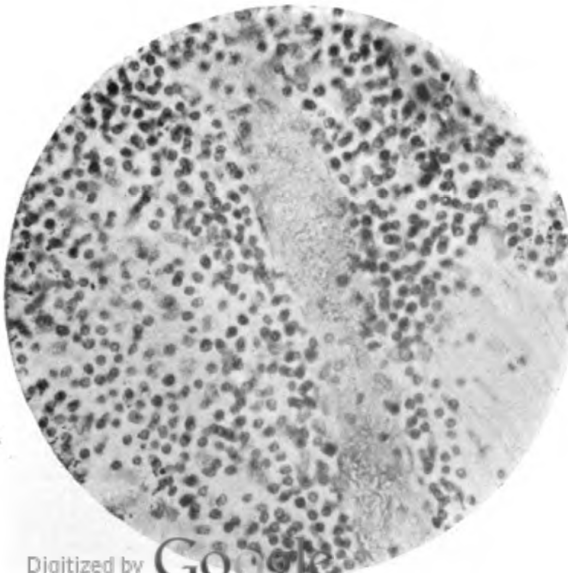


FIG. 6.



Neuroglia.—Although the neuroglia nuclei are increased in number the glial elements chiefly concerned in the formation of the marginal degeneration are fibrillar in character, forming a fine feltwork, which stains pink with picro-fuchsin.

The pia mater investing the cord and forming its septa has undergone thickening to an exaggerated degree, and shows an intense cellular infiltration, which is most marked near the septa, and at the attachment of the ligamentum denticulatum (Fig. 4). The cells are for the most part small elements resembling lymphocytes, but plasma cells are also present. The latter give the characteristic staining reaction, and are often flattened or spindle-shaped. Some are actually in the substance of the cord. This cellular infiltration can be traced outwards along the entering posterior nerve roots (Fig. 5).

Vessels.—Periarteritis and phlebitis with cellular infiltration is observed in all the large vessels. Many of the veins are engorged, and show hyaline thrombosis. There is slight intimal proliferation in the arteries.

The small vessels penetrating the cord show great thickening of their walls. Those of the grey matter are much engorged.

Nerve cells.—The cells of the anterior and posterior cornua show an atrophic pigmentary degeneration. Many are misshapen and heavily laden with pigment granules; the lymphatic spaces surrounding them are increased in size. It is possible in some cells to make out a superadded acute chromatolytic change.

Corpora amylacea are numerous in the posterior columns.

While these appearances hold good for all segments of the cord, slight variations occur. Thus the fibre loss in the posterior columns is most evident in the third and fourth cervical segments; the annular sclerosis increases from above downwards, and assumes its greatest extent in the eighth cervical segment.

Dorsal cord.—The changes present throughout the whole length of the dorsal cord closely resemble those found in the cervical region.

The fibre loss in the first dorsal segment is greater than in any other region. It is worthy of note that the small patches of sclerosis in the columns are in close relation to blood vessels. In other words, the loss of fibres first occurs in the neighbourhood of the smaller vessels.

Another interesting feature is the irregular and almost

chaotic manner in which the myelin sheaths are arranged. Many are cut in their longitudinal axes, and form loops and whorls, some of which can actually be seen looping round the blood vessels of the cord. Hyaline change is present in the inner coats of the vessels, forming homogeneous rings which stain orange-red with Van Gieson's picro-fuchsin.

The posterior columns show relatively less sclerosis than in the cervical region.

Lumbo-sacral region.—All the degenerative changes which have been described can be followed to the lowest segment of the cord. Many of the large motor nerve-cells show early chromatolytic change—solution of chromophile elements, nuclear swelling and displacement.

Posterior root ganglia.—Examination of the root ganglia was of interest in view of the patient's herpes zoster. The eleventh dorsal, twelfth dorsal, and first lumbar ganglia were examined. There are no gross changes; neither hæmorrhage nor sclerosis is present.

The ganglion capsule is thicker than normal. In the loose periganglionic areolar tissue, at the proximal pole of the ganglion, are two collections of small darkly staining cells.

The neurilemma nuclei are slightly increased in number.

Nerve cells.—There are few healthy nerve cells. All exhibit chronic chromatolytic change (Fig. 6). Many are shrunken and heavily pigmented, some have fallen out of their endothelial capsules, the lining cells of which have proliferated. It is seldom possible to differentiate the various types of nerve-cell. The chromophile material is dust-like and faintly stained; vacuolation is an occasional feature. The interstitial tissue is increased in amount, and the walls of the blood-vessels are thickened.

Summary.—The cord showed a condition of generalised syphilitic meningitis, with which were associated diffuse and annular sclerosis. The blood-vessels of the cord exhibited peri- and endarteritis. These changes were found throughout the whole length of the cord. The posterior root ganglia also showed changes of a chronic inflammatory character.

From the pathological findings it is evident that the patient was suffering from the immediate effects of the syphilitic virus on the interstitial structures of the nervous system. For anatomical reasons these had their seats of election in certain

localities of the cord, and were associated with a resulting secondary degeneration of the nervous elements.

Thus the disappearance of nerve fibres resulted from a primary myelin degeneration, the consequence of vascular obliteration and pial inflammation.

The great importance of the nutritive function of the smaller blood-vessels is clearly shown by the loss of nerve fibres, which is most intense at the margin of the cord.

Of the changes described, one of the most striking was the thickening and infiltration of the pia mater. The pial inflammation extended with undiminished severity the whole length of the cord, and could be traced in a cephalic direction along the brain-stem. As an immediate result of the syphilitic virus it showed features which served to distinguish it from the leptomeningitis found in dementia paralytica. In cases of general paralysis of similar duration the infiltration of the pia and adventitial spaces of the cord-vessels with plasma cells is always more pronounced than in meningo-vascular syphilis, while in the latter affection perivascular infiltration is rarely discovered, nor does one encounter the numerous branched cells filled with fine granules which are common in general paralysis of the insane. In the latter condition the most constant morbid change in the vessels is plasma cells infiltration and hyaline degeneration ; in interstitial syphilis gross thickening with peri- and endarteritis are found.

The intense annular or marginal sclerosis can be safely attributed to compensatory neuroglia hypertrophy, rather than to a direct reaction to the syphilitic virus. Its distribution can be readily understood when one remembers the peculiarity of the arterial distribution of the spinal cord.

The grey matter is almost wholly supplied by the anterior spinal artery, while the white matter is supplied from other sources.

The two posterior spinal arteries form by their division a rich arterial investment around the whole circumference of the cord. Their branches are most numerous in the posterior columns of the cord, and are fewer in number in the anterior columns, which are chiefly supplied by the anterior radicular arteries, and by the anterior cornual branch of the commissural artery. They enter the substance of the cord in a direction roughly coincident with its radii, and are stated to be both

longer and of larger calibre than those in the lateral aspect of the cord, so that they penetrate the greater part of the posterior columns. The cornu-commissural zone, however, is believed to receive its blood-supply from branches leaving the adjacent grey matter, a fact which may explain its frequent integrity in posterior column disease of vascular origin.

Consequently, thickening and obliteration of these fine centripetal branches will bring about a grave disturbance of nutrition, a progressive loss of nerve elements, and a secondary neuroglia hyperplasia.

The degenerative lesions in cords of general paralytics are in marked contrast with those described above. Apart from system lesions (tabetiform), diffuse degeneration is very common, and assumes a great many different forms, but it varies in different levels of the cord, and is never, even in the most chronic cases, attended by so extreme a degree of neuroglia sclerosis.

With regard to the existence of herpes zoster, microscopic examination failed to demonstrate evidence either of hæmorrhage or sclerosis.

The occurrence of symptomatic zoster in spinal disease is well known, and is particularly frequent in dementia paralytica. It is not improbable that it may result, as has been suggested, not only from a posterior ganglionitis, but also from meningeal lesions implicating the posterior nerve roots.

Such an explanation seems feasible in the present case where the meningeal change was pronounced.

The cerebral cortex.—Microscopically, the cortical nerve cells all exhibit morbid changes, chiefly of a chronic character. Many of the larger cells show an almost entire loss of the chromophile material, staining very faintly. As a rule, the general conformation of the cortical elements is well preserved, but areas exist, especially in frontal convolutions, where nerve

FIG. 7.—Small area of cortical sclerosis. 1. Sclerosed area. 2. Pia mater.

FIG. 8.—Similar to Fig. 7. Stained to show neuroglia.

FIG. 9.—Cerebral cortex. Proliferation of adventitial cells of vein in white matter.

FIG. 10.—Wall of cavity in right occipital lobe. 1. Cavity. 2. Zone of new capillary formation.

FIG. 11.—Small sub-cortical cavity, showing neuroglia proliferation in its walls.

FIG. 12.—Small basal perforating artery, showing an extreme degree of obliterative endarteritis. (From another case of meningo-vascular syphilis.)

FIG. 7.

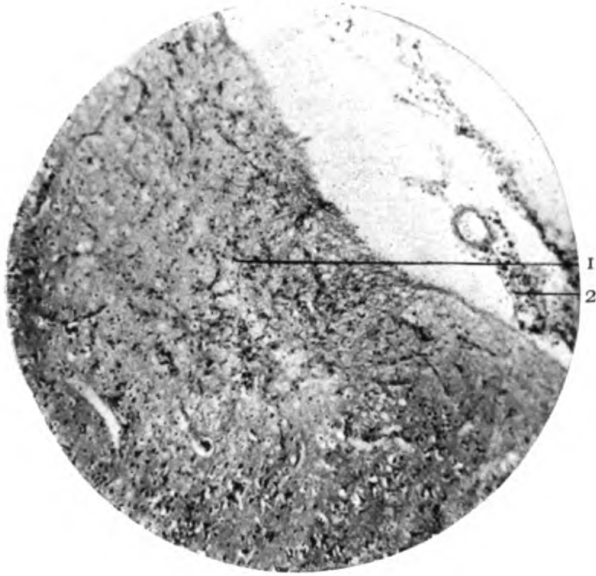


FIG. 8.

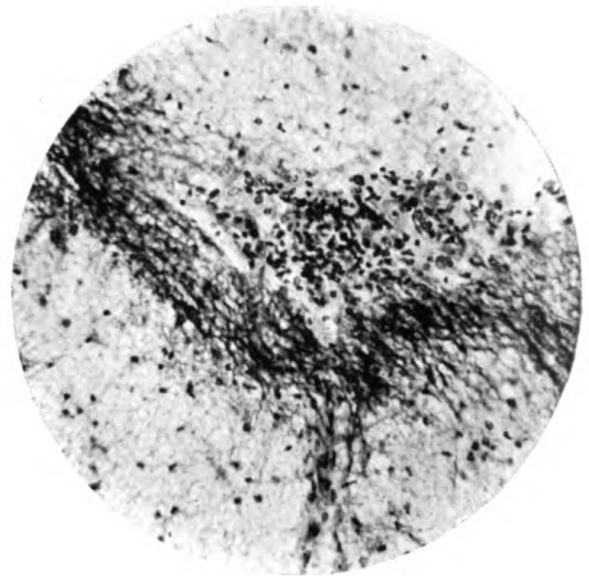


FIG. 9.

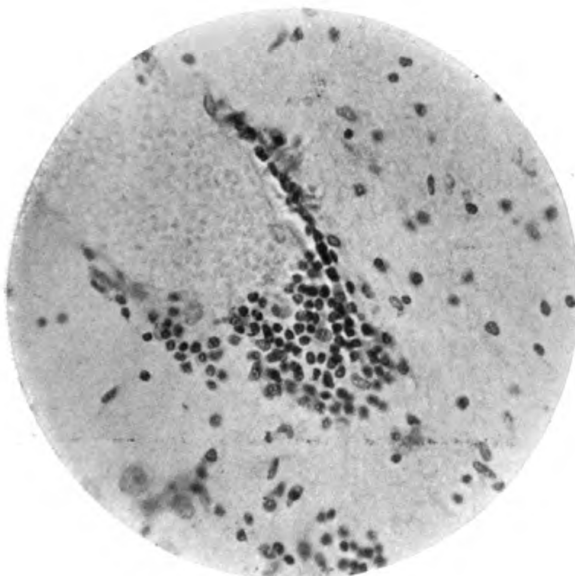


FIG. 10.

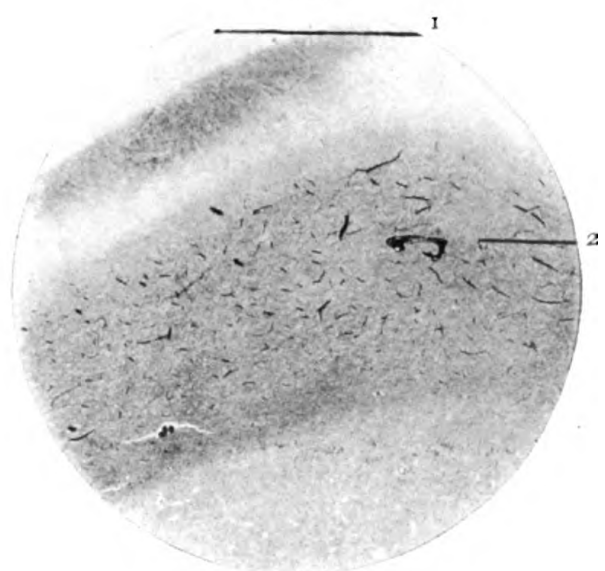


FIG. 11.

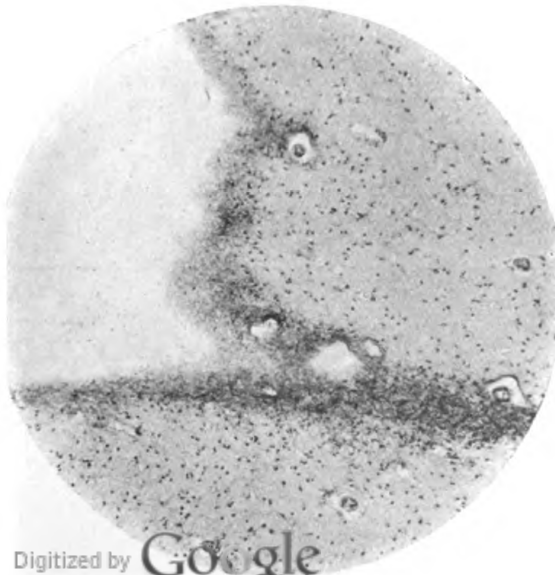


FIG. 12.



cells have lost their linear arrangement, being turned in all directions, and frequently in relation to patches of cortical sclerosis, in the latter neuroglia proliferation is very marked (Figs. 7 and 8).

The pia mater is in a state of chronic lepto-meningitis, its vessels are engorged, and in their neighbourhood are collections of lymphocytes and plasma cells; plasma cells are also found in the pial septa penetrating the cortex.

The capillaries show thickening and hyaline-fibroid degeneration of their walls; in certain areas they appear increased in number.

Perivascular infiltration is found in some situations (Fig. 9). The best examples are seen around the vessels of the white matter. The infiltrating cells are chiefly lymphocytes—only a few plasma cells can be seen. A few rod cells are present.

Collections of neuroglia nuclei arranged in linear rows, and large masses of pigment can frequently be discovered in relation to the vessels, especially in the deeper cortical layers.

The neuroglia tissue shows a considerable increase, notably in the superficial and deep cortical layers. Where small softenings exist the neuroglia nuclei are greatly increased in number.

Gross focal lesions, as already mentioned, exist in the white matter; the situation and shape of the larger of these have already been described. An examination of the wall of a large cavity situated in the right occipital lobe shows only a moderate degree of neuroglia proliferation, the fibrillary change being slight. There is, however, a marked new capillary formation in the tissue bordering on the cavity (Fig. 10). A number of smaller subcortical cavities are also present, which differ from the former in that the neuroglia forms a dense interlacing feltwork of fibres in the white matter immediately bordering on the cavity (Fig. 11). The walls of the blood-vessels near these small areas are much thickened, and surrounded by dense glial tissue.

The medullated nerve fibres show primary degeneration of their sheaths, and there is a general atrophy of the cortical association fibres.

The small perforating arteries supplying the corpus striatum are found to show very marked syphilitic endarteritis (Fig. 12).

A consideration of these histological findings shows that the

morbid changes are almost wholly the result of the action of the syphilitic virus upon the interstitial brain elements. The evidence of syphilis centralis is very slight, for the few changes suggestive of general paralysis are not widely diffused in the manner one has learnt to associate with that disease.

Cranial nerves.—Methods employed : Marchi, Wolters, iron-hæmatoxylin, toluidin blue, and Van Giesen.

There are no changes of importance except in the optic nerves.

The osmic acid stain gives no positive results, although a pseudo-Marchi reaction is present in some nerves. The myelin sheaths show primary degenerative changes; they present numerous varicosities and swellings, while the axis cylinders show irregularities in their calibre. The nerve sheaths are much thickened, and both in the sheaths and septa are large numbers of mast cells; their granules stain the characteristic purple colour, and their ill-defined nuclei pale blue.

Collections of lymphocytes in relation to vessels were found in several nerves.

Gasserian ganglia.—Similar changes are present on the two sides.

Many of the nerve cells are in an advanced stage of chromatolysis, having almost colourless pale cell bodies, with a few chromophile granules in the situation of the nucleus. Others show less advanced degeneration—vacuolation, pigmentation, and irregularities in form.

The interstitial connective-tissue is increased in amount, and the vessels show thickening of their walls. There is no lymphocytic infiltration. Numerous concentric bodies are present. The ganglion capsule is much thickened.

Optic nerves : Right optic nerve.—A very considerable number of funiculi, especially those at the periphery, exhibit sclerosis; their nerve fibres have largely disappeared, and no longer stain by Weigert's method. The employment of osmic acid yields negative results. Sections stained by iron-hæmatoxylin show a marginal proliferation of the supporting neuroglia. The fibrous septa dividing the nerve fibres into bundles are much thickened. The nerve sheath is thickened, and contains large numbers of lymphocytes in relation to its vessels.

Left optic nerve.—Similar changes, but in a much more marked degree, are present. Many of the nerve bundles have lost all their fibres (Fig. 13), and suitably stained sections show large

branching strands of neuroglia passing among the degenerated nerve bundles (Fig. 14). The thickened nerve sheath shows an intense infiltration with small round cells.

These changes are clearly the result of a syphilitic process similar to that found in the cord, and are probably sufficient to account for the patient's visual defect.

The Medulla Oblongata : Microscopic Examination.

The naked-eye appearances found in the medulla of this case have already been described. Although the *post-mortem* examination fully corroborated the clinical diagnosis, it also showed that the case was complicated by other lesions, and by an extension of the thrombotic process. Fortunately, the latter event, which led to the patient's death, was a terminal condition, and did not complicate the histological study of the diseased area.

The methods of staining employed were: Wolters' modification of Weigert's method, Wolters' counterstained by Van Giesen, Marchi's osmic acid stain (Orr's modification), and hæmatoxylin-eosin. For the examination of vessels the following additional stains were used: hæmatein, orcein, toluidin blue, cresyl violet, and iron-hæmatoxylin. Frozen sections were stained with Nile blue.

The sections of the medulla oblongata were obtained by the method of serial section, and my thanks are due to Mr. H. Wisken, my laboratory assistant, for the great care with which they were prepared.

Vessels.—As already remarked, the left posterior inferior cerebellar artery was completely thrombosed. There was no corresponding vessel on the right side (Fig. 15).

Transverse sections exhibit changes of a typically syphilitic nature.

The outer coat is the seat of proliferative activity, and is infiltrated with small lymphocytes. In this periarteritis the cellular elements are in predominance, affording a guide to the rapidity of the change. Many of the cells show degenerative changes. The cellular infiltration varies slightly at different points of the circumference, and extends into the outer layers of the media. In the latter the changes are relatively less marked. There is slight overgrowth of the fibrous elements, granular degeneration of the muscle nuclei, and metachromatic

staining with toluidin blue. The most important changes are confined to the intima. It had become thickened by the formation of concentric laminae of fibrous tissue somewhat loosely arranged, whose interstices are occupied by red blood corpuscles and fixed connective-tissue cells. In some places separation from the media has taken place.

The internal elastic lamina shows fragmentation and actual proliferation, which is well seen in orcein stained sections.

The intimal change has not produced any great narrowing of the vessel, but its lumen is entirely filled with a thrombus. In this the process of organisation is well advanced. Red blood corpuscles remain discrete in some areas: in others where organisation is more advanced, they have broken down or coagulated.

Comparatively few leucocytes are present: the cells are mainly those of actively developing granulation tissue—rounded, oval and spindle-shaped cells, many with branching processes or fibrils. By their activity numerous fine capillary elements have formed in the thrombus.

A feature of great interest is the presence on one side of the lumen of a partially newly constructed artery, its walls being apparently in continuity with the proliferated intima. Numerous large spindle-shaped and elongated cells may be found in its wall, which is of loose formation and considerable thickness in a central direction. This new blood channel cannot be regarded as a typical example of canalisation, in which one can usually recognise the elements of all three coats. There are no muscle fibres and no elastic tissue in its construction. Its lumen is almost completely occluded by a thrombus apparently of recent origin. It is composed of unaltered red blood corpuscles, fibrin, and leucocytes, the latter in considerable numbers.

In sections taken at a slightly higher level (*i.e.* in the direc-

FIG. 13.—Left optic nerve; transverse section, stained by Wolters' method. Note peripheral loss of fibres.

FIG. 14.—Transverse section, left optic nerve, stained to show neuroglia proliferation.

FIG. 15.—Left posterior cerebellar artery. Organising thrombus with canalisation.

FIG. 18.—Lesion in the lower third of the olive, left side. The area of softening is confined to the formatio reticularis grisea.

FIG. 19.—Transverse section of the medulla oblongata at a slightly higher level. The lesion has extended further in a dorsal direction.

FIG. 20.—The lesion has extended almost to the floor of the fourth ventricle. Note the integrity of the inter-olivary and inter-reticular tracts.

FIG. 13.

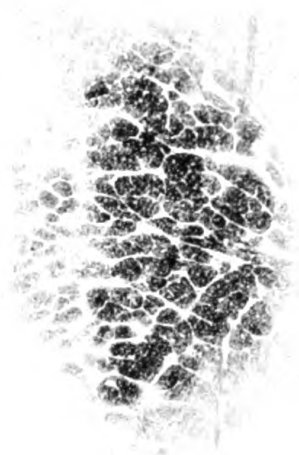


FIG. 14.

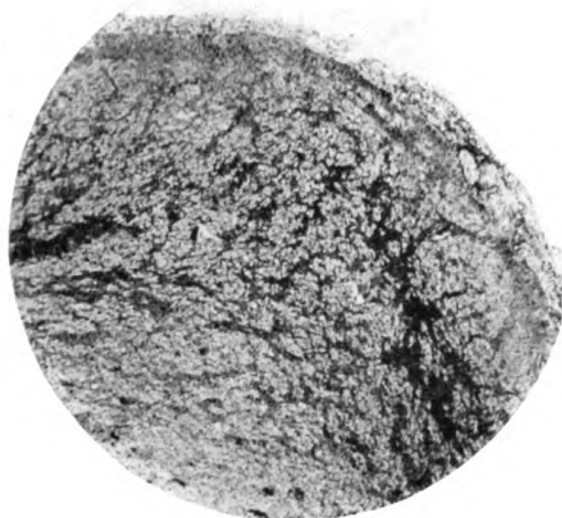


FIG. 15.



FIG. 18.

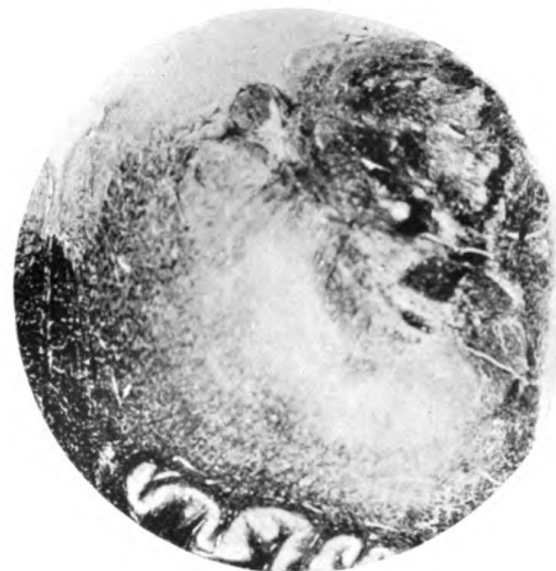
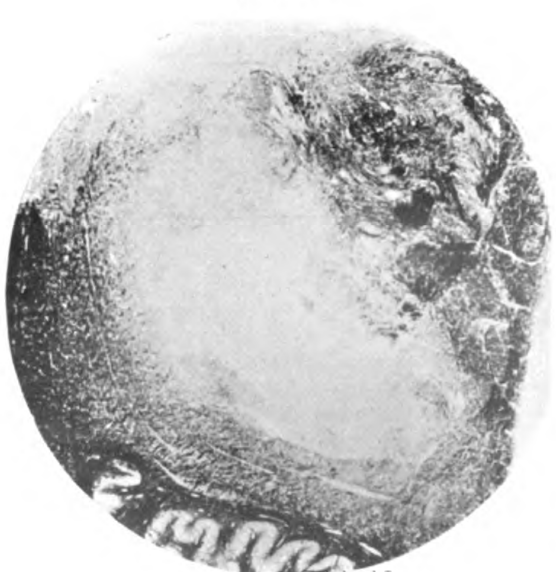


FIG. 19.



FIG. 20.



tion of the blood-stream) the position of this new vessel is altered. It lies further away from the wall of the artery, with which it no longer establishes any relation.

The vertebral arteries also show syphilitic peri- and endarteritis; they are filled with a recent thrombus.

The basilar artery.—Similar changes are also present: periarteritis and obliterative endarteritis. In sections stained with Nile blue fine drops of fatty acid coloured purplish red are found, both in the adventitial and middle coat. In the deeper layers of the proliferated intima this red staining material is extremely abundant, forming a stratum of granular material not unlike that found in arteritis deformans.

The lesion.—The first evidence of the lesion is met with in the lower third of the olive (Fig. 18). At this level only its dorsal lamina is well formed; the mesial accessory olivary nucleus is still lying lateral to the pyramid, while the dorsal accessory olivary nucleus has only made its appearance. The decussation of the fillet has not completely taken place; a few deep arcuate fibres can still be seen streaming forwards and inwards in wide curves. The posterior longitudinal bundle has not yet become marked off from the medial lemniscus.

In this and all other levels of the medulla, the fibre tracts and nuclei lying to the right of the median raphe appear normal.

On the left side there is an obvious softening confined to the formatio reticularis grisea; this is divided into two areas by a band of almost normal arcuate fibres. The anterior of these lies immediately to the inner side of the substantia gelatinosa, in the position of the rubro-spinal tract; it does not extend anteriorly as far as the inferior olive. There is no actual cavitation; under a low power the area is seen to be filled with myelin drops, and broken distorted fibres.

The other area lies in the position of the lower end of the nucleus ambiguus, and in it the destruction of fibres is more complete.

From the distribution of the lesion at this level it is evident that the following structures would be implicated: The highest fibres of the bulbar part of the spinal accessory nerve, as they pursue a course ventral to the spinal root of the trigeminal nerve; the spino-thalamic tract; the rubro-spinal tract; the lower end of the nucleus ambiguus, and the fibres issuing from it.

It is important to note the integrity of the following parts : The pyramid, the inferior olive, the medial lemniscus, the fibres of the hypoglossal nerve, the spinal tract of the trigeminal nerve, and the dorsal and ventral spino-cerebellar tracts.

In the course of a very few sections the area of softening becomes larger, forming a single cavity in the formatio reticularis grisea (Fig. 19). Its anterior or medial wall shows but little encroachment in the direction of the olive and fillet, growth in size taking place at the expense of the dorsally situated fibres.

Thus, in the thirtieth section, it has extended as far as the fasciculus solitarius, which lies close to its outer wall. Its posterior extremity has not yet reached the dorsal vagal nucleus.

At this level the commencing olivo-cerebellar fibres are interrupted, and also the lowest fibres of the motor part of the vagus nerve. The tracts of Gowers and Flechsig are intact.

In section 100, which represents a level slightly below the middle of the inferior olive, the cavity has almost reached the lateral margin of the medulla (Fig. 20). The tecto-spinal and ventral spino-cerebellar fibres are represented by a thin stratum of degenerated fibres.

The descending root of the trigeminal nerve is here implicated, the substantia gelatinosa on its inner side being completely destroyed; the trigeminal fibres themselves are thinned, forming a pale mass contrasting with the dense bundles of the opposite healthy root.

The vago-glosso-pharyngeal nucleus is still outside the dorsal limit of the cavity. A small area of softening has made its appearance on the inner side of the dense strands representing the commencing restiform body.

FIG. 16.—Diagram (after Dejerine) illustrating the tracts of the medulla oblongata. *Py.* Pyramidal tract. *I.O.* Interolivary stratum of medial lemniscus conveying pressure and postural sensations from opposite side. *Ol.* Inferior olive. *I.R.* Inter-reticular stratum of medial lemniscus conveying tactile sensations from opposite side. *C.T.* Ventral cerebellar fibres. *S.T.* Spino-thalamic tract conveying pain and temperature fibres from opposite side. *V.C.T.* Secondary sensory trigeminal fibres (pain and temperature) from opposite side. *T.R.* Spinal tract of trigeminal nerve. *Sg.R.* Substantia Gel. Rolandi.

FIG. 17.—Retro-olivary bulbar syndrome. Crossed dissociated anæsthesia, with retro-palato-laryngeal paralysis.

FIG. 21.—Transverse section through mid-olivary region. The cavity has assumed its widest dimensions.

FIG. 17.

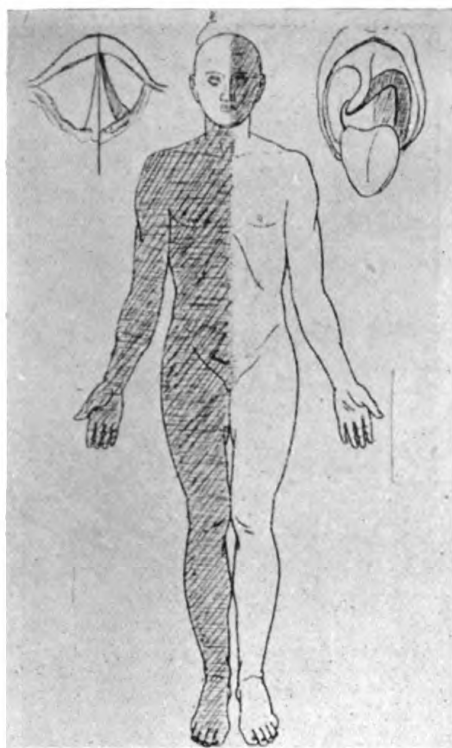
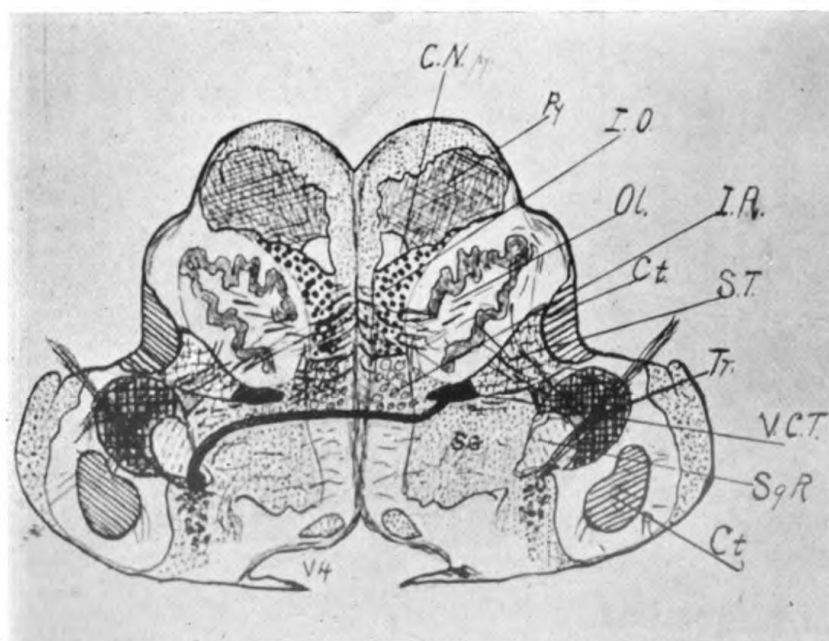


FIG. 21.



FIG. 16.



To illustrate paper by Dr. R. M. STEWART.

The cavity assumes its widest dimensions in the mid-olivary region (Fig. 21). In this situation it extends forwards almost to the dorsal accessory olivary nucleus. The mesial boundary of the cavity skirts the inter-reticular tracts (the fillet and posterior longitudinal bundle). The issuing fibres of the hypoglossal nerve lie very close to its margin. Dorsally the posterior wall is reached at the grey matter on the floor of the fourth ventricle; a few degenerated fibres separate the cavity from the dorsal nucleus of the vagus.

The area of softening shows very little extension in a lateral direction; upon its outer side may be seen the intact fasciculus solitarius, and vago-glosso-pharyngeal fibres. At the margin of the medulla, just dorsal to the olive, is a stratum of degenerated fibres represented by myelin drops and swollen fragmented sheaths.

The spinal root of the trigeminal nerve, broken into separate bundles by the olivo-cerebellar fibres and issuing root fibres of the vagus, can be identified. That portion of it lying dorsal to the vago-glosso-pharyngeal fibres is very degenerated (Fig. 22); indeed, in this situation there exists a small softening; the remaining fibre bundles are much atrophied and stain poorly. The restiform body has preserved its normal shape, but stains more lightly than that of the opposite side; it has sustained a considerable loss of nerve fibres; the olivo-cerebellar fibres are conspicuously thinned.

The descending root of the vestibular nerve forms a conspicuous object on the inner aspect of the dorsal portion of the restiform body.

In a few sections above, although the cavity has commenced to diminish in size, its anterior limit has extended forwards, so that several loops of the posterior lamina of the inferior olive are destroyed. The fibres skirting the olive (*siliqua olivæ*) are much thinned and the thick strands of olivo-cerebellar fibres end abruptly as they leave that structure (Fig. 23).

In the succeeding sections the cavity becomes much restricted in size. The small softening described as interrupting the descending root of the trigeminal nerve, rapidly disappears; in section 204 the fibre bundles are all present, although the individual fibres are reduced in number and thinned.

The gradual obliteration of the cavity takes place first of all by the extension inwards of tissue lying dorsal to the olive, so

that two cavities result, the smaller occupying an oval area in the posterior lamina of the inferior olive, the larger being in *formatio reticularis grisea*, as already described (Fig. 24). The latter area becomes rapidly smaller, and oval in form. Near its uppermost limit it shifts ventrally, lying immediately behind the inferior olive.

Finally the cavity disappears, the sole indication of its position being the presence of a lightly stained area in the *formatio reticularis grisea* just dorsal to the olive and near the medial lemniscus. Under a low power the fibres in this area are seen to show morbid changes—fragmentation, irregularity of contour, etc. At this point, which may be said to mark the uppermost level of the softening, the fibres in the restiform body are just commencing their passage from it towards the cerebellum.

The description of the lesion cannot be considered complete without some reference to the pathological changes in the vascular and supporting structures in its immediate neighbourhood.

The posterior inferior cerebellar artery, in its course round the medulla, sends in numerous short terminal arteries, which have no anastomosing connections. An examination of these shows changes of a chronic inflammatory character. The vessel walls are very markedly thickened; many are infiltrated with small round cells (Fig. 25), and all the larger arteries are invariably filled with red blood corpuscles, undergoing fragmentation and other degenerative changes.

Near the edge of the cavity are numerous branching capillaries, apparently newly proliferated vessels. The nerve fibres in the degenerated tissue surrounding the cavity show all stages of destruction (Fig. 26); their myelin sheaths are irregular, varicose, and much fragmented. The axis cylinders

FIG. 22.—Descending root of the left trigeminal nerve. Its dorsally situated fibres are very degenerated.

FIG. 23.—Transverse section from higher level. The cavity is reduced in size, but has encroached on the inferior olive. The spinal root of the trigeminal nerve forms a conspicuous mass.

FIG. 24.—The lesion has nearly disappeared and occupies a small area dorsal to the inferior olive.

FIG. 25.—A small bulbar artery showing periarteritis.

FIG. 26.—Altered myelin sheaths in the neighbourhood of the cavity.

FIG. 27.—Swollen axis cylinders in the wall of the medullary lesion. A. Axis cylinder.

FIG. 22.



FIG. 23.



FIG. 24.



FIG. 25.

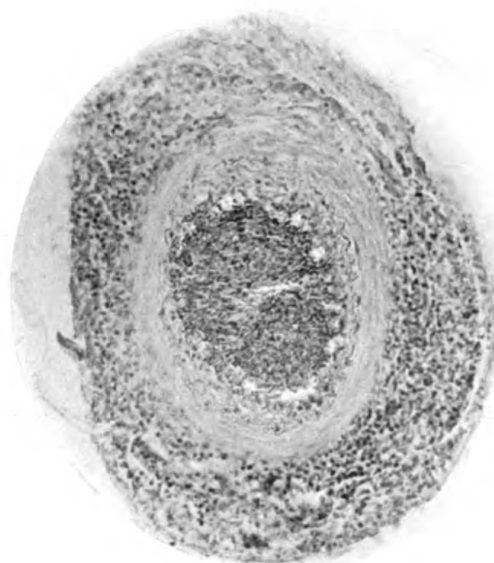


FIG. 26.

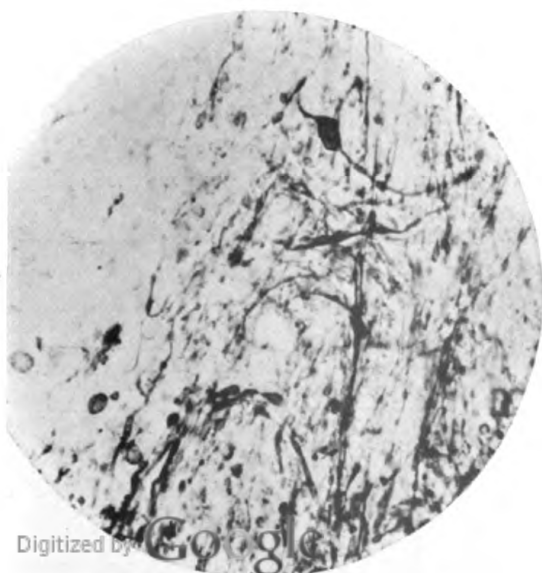
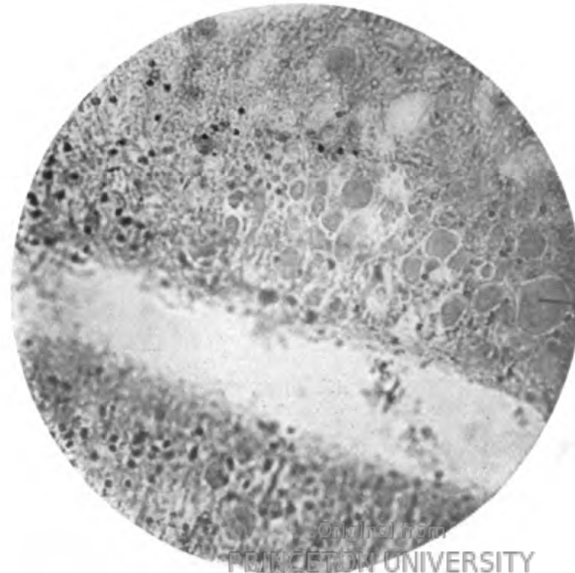


FIG. 27.



have undergone morbid change. Many of them are enormously swollen, especially at the lateral edge of the cavity, where its edge meets the peripheral band of sclerosis (Fig. 27).

The perivascular spaces are much dilated. That this is not an artefact resulting from the methods of fixation is indicated by the presence in them of amorphous pink staining material.

The areas at either extremity of the softening, where no actual cavity exists, show numerous proliferated capillaries.

Changes consequent on the lesion above and below.—Above the lesion there is very little change which can be attributed to its presence. For a few sections the restiform body stains less darkly than its fellow on the opposite side, but this point of difference is soon lost, as olivo-cerebellar and other fibres enter it from normal zones above the lesion.

Nor do Marchi preparations give any evidence of ascending degeneration. Both seventh nerves in their passage through the pons contain fine blackened droplets, and a similar slight degeneration may be observed in the cortico-spinal paths.

Since the fibre tracts interrupted by the softening are almost entirely secondary sensory paths, degeneration in the lower part of the medulla must necessarily have been slight. The osmic acid stain in this section of the medulla gives negative results. In none of the sections (below the lesion) is any disparity between the two sides observed. Although it has been stated that throughout the medulla the nervous tracts and nuclei lying to the right of the median raphe were normal, this cannot be regarded as strictly accurate, for in every section of the brain-stem the effects of the syphilitic virus are very evident. Thickened blood vessels, atrophic nerve fibres, and marginal sclerosis can be seen at all levels. The degree of sclerosis in the lower part of the medulla equals that found in the spinal cord.

Since the pons and medulla oblongata were bichromated no tissue was available for the adequate study of nerve cells. The hæmatoxylin-eosin stain only permits conclusions as to gross changes, such as extreme atrophy and destruction.

In the sections described above, the cells of the nucleus of the hypoglossal nucleus show little deviation from the normal ; they seem of normal size and form ; the smaller motor and sensory cells of the dorsal vagus nucleus appear shrunken and degenerated. Where the substantia gelatinosa Rolandi is impli-

cated in the neighbourhood of the cavity few nerve cells can be identified.

Although the syndrome occasioned by a lesion of the posterior inferior cerebellar artery is usually sharply defined and easily recognised, clinically it may yet be impossible to exclude with certainty involvement of neighbouring vessels, for great variations occur in the distribution of the bulbar blood-vessels. Thus, where one cerebellar artery is absent, the anterior branch of the vertebral artery may supply much the same area.

Bruer and Marburg have recorded a case in which the vertebral artery was occluded, while the posterior inferior cerebellar artery escaped, and yet the lesion occupied almost exactly the area found in typical cases.

In the majority of recorded cases the lesion has occurred on the left side, and has been in the nature of a thrombus. Usually the morbid changes causing this result affect the parent vessel as well, so that thrombosis of the vertebral artery is more frequently present than absent. The present case conforms to the usual findings: the lesion was on the left side, there being no right posterior inferior cerebellar artery, and the thrombotic process extended into the basilar and both vertebral arteries. Notwithstanding this, the bulbar lesion may be regarded as a very typical one, since the various vascular occlusions were of different ages. The correctness of the surmise that the syndrome occurred some months prior to the patient's death is indicated by several facts. In the first place, there was an entire absence of system degeneration in Marchi preparations. We know from the researches of Van Gehuchten and others that the products of myelin disintegration may be demonstrated in the cord by osmic acid for a period of several months dating from the initial lesion.

The appearances in the posterior inferior cerebellar artery were not those of a recent thrombus, but one which had existed for some length of time; organisation and canalisation were well advanced.

The lesion in the medulla was represented by an ischæmic softening of a duration sufficient to allow of the complete removal of the products of degeneration, for a small sharply defined cavity was found, and not the usual faintly stained necrotic area.

Precisely when the vascular lesion causing the clinical syndrome occurred it is hardly possible to say. The patient was for months in a state of constant excitement, so that any detailed clinical examination was rendered impossible. When also one remembers that gross paralysis—apart from those in the territory of the vaso-glosso-pharyngeal nerve—does not occur, and that consciousness is preserved, it is easy to see how the condition might escape recognition, unless a definite complaint were made. It seems not improbable that the vascular occlusion occurred in November, 1913, the month in which convulsive seizures were first noted.

The terminal event of acute bulbar symptoms makes it tolerably certain that the vertebral and basilar arteries were occluded two days prior to death, for the former supply by their radicular branches, and through the anterior spinal artery, the vital nuclei of the ventricular floor.

The correlation of each symptom with its pathological basis is comparatively simple in this case, and raises a number of interesting questions. The absence of giddiness, instability, and hemiataxia is in accordance with the usual clinical findings, for usually in the course of a few months, many of the symptoms disappear leaving a residual sensory defect.

The sudden onset of giddiness is attributed to disturbance of Deiter's nucleus, while hemiataxia is assumed to depend on interruption of the fibre tracts entering the inferior cerebellar peduncle.

Destruction of the nucleus ambiguus explains the unilateral palatal and laryngeal paralysis, and also the difficulty in swallowing. Since the fasciculus solitarius had escaped destruction there was probably no disturbance of taste, nor sensory loss in the pharynx.

It will be remembered that there was evidence of interruption of the sympathetic fibres supplying the face and eye; the left side of the face remained dry when the rest of the body was bathed in sweat; paralysis of the ocular sympathetic on the same side was also noted. This paralysis of cervical sympathetic fibres is a striking feature in the syndrome, and indicates that the cervical sympathetic fibres running in the *formatio reticularis grisea* do not cross in any part of their course below the level of the inferior olive.

In the distribution of the left trigeminal nerve there was

alteration in the sensory field; complete loss to painful stimuli and all degrees of temperature existed, while touch and tactile discrimination were preserved. The most probable cause of loss of pain and temperature sense was an interruption of the secondary trigeminal fibres as they traversed the *formatio reticularis grisea* from their cells of origin in the *substantia gelatinosa* to the quinto-thalamic path on the opposite side. At the same time there must have been some slight involvement of similar fibres coming from the opposite side (see diagram).

The lesion had only implicated a small part of the spinal root of the trigeminal nerve; usually this structure is largely destroyed, although there are cases on record in which it entirely escaped.

The preservation of touch in the disturbed area can be explained, as Woods has suggested, on the supposition that these sensations, traversing the sensory root, are conveyed directly to the chief trigeminal nucleus, and thus escape in destruction of the descending root.

A further point of interest was the loss of the conjunctival reflex on the left side, although tactile sensibility was unimpaired. As Spiller has remarked, it may reasonably be assumed that the afferent path for the conjunctival reflex is subserved by pain fibres.

The writer makes no claim of accuracy in the mapping out of the area of altered sensibility, since the examination had to be conducted with rapidity on a patient who showed some degree of distractibility.

The remote effects seen on the right side of the body comprised a dissociated anæsthesia similar to that in the trigeminal area.

Preservation of tactile sensibility is explained by the integrity of the medial lemniscus, while loss of pain and temperature is caused by destruction of the spino-thalamic tract; the latter contains fibres for pain, heat, and cold which have crossed in the anterior commissure of the spinal cord.

This very definite clinical picture was obscured shortly before death by the spread of the thrombotic process to the vertebral and basilar arteries. The anterior spinal artery has a very important territory to supply, namely, the floor of the fourth ventricle, containing vital nuclei, and the grey matter of the

spinal cord. As a consequence of its occlusion, rapid respiratory failure was brought about.

The left facial palsy referred to could hardly have resulted from the retro-olivary lesion, since the latter did not reach the level of the pons. Most probably it was caused by an independent vascular lesion.

Anger.⁽¹⁾ By THEO. B. HYSLOP, M.D., F.R.S.E.

Synopsis.

(1) BRIEF reference is made to some of the earliest writings on the subject of anger, and comparison is made with more recent views.

(2) Anger, as traced throughout the scale of evolution of the animal kingdom, has served as a stimulus to aggression for the procuring of food, as an aid to survival, and as a necessity for the acquirement and maintenance of supremacy.

(3) Anger, occurring in mankind is (phylogenetically) an expression of an atavistic reversion or retrogression, and (ontogenetically) also an indication of familial or individual devolution.

(4) Anger, clinically considered, ranges in varying degrees of severity, from mere temporary defective inhibition to conditions of suicidal and homicidal impulse of medico-legal and even national importance, as individuals, families or communities, become affected.

(5) Reference is made to some of the causes, symptoms, and methods of treatment of anger as coming within the experience of the medico-psychologist.

In view of the medico-psychological bearings of current events, I trust that my remarks pertaining thereto will not be regarded as exceeding the bounds of medical decorum; rather would I plead that they have been so framed as to elicit opinions from others fully qualified to judge.

The oldest book in the world is thought to be *The Precepts of the Prefect, the Feudal Lord, Ptah-hotep*, who lived under the majesty of the king of the South and the North "Dah-ka-ra," or "Assa" of the Fifth Egyptian Dynasty (about

3589 B.C.). M. Eugene Revillont believes that Ptah-hotep was "Son of the king, the eldest of his loins" (that is to say, inheriting son of the Pharaoh), and Myer believes that he was 110 years of age when he wrote this treatise.

In these Precepts we find the following suggestions as to anger: "If thou findest a disputant while he is hot, and if he is superior to thee in ability, lower the hands, bend the back, do not get into a passion with him. As he will not let thee destroy his words, it is utterly wrong to interrupt him; that proclaims that thou art incapable of keeping thyself calm when thou art contradicted." "If then thou hast to do with a disputant while he is hot, imitate one who does not stir. Thou hast the advantage over him if thou keepest silence when he is uttering evil words. 'The better of the two is he who is impassive,' say the bystanders, and thou art right in the opinion of the great. If thou findest a disputant while he is hot, do not despise him, because thou art not of the same opinion. Be not angry against him when he is wrong; away with such a thing. He fights against himself; require him not (further) to flatter thy feelings. Do not amuse thyself with the spectacle which thou hast before thee; it is odious (it is) mean (it is the part) of a despicable soul (to do so). As soon as thou lettest thyself be moved by thy feelings, combat this (desire) as a thing that is reproved by the great." "If thou art annoyed at a thing, if thou art tormented by someone who is acting within his right, get out of his sight, and remember him no more when he has ceased to address thee."

The traditional story of the anger of Ra, as taken from the Westcar papyrus (about 2800 B.C. or earlier), contains much pertaining to the subject of anger. The "Divine Eye" takes the form of "Hathor," suddenly falls upon men, and slays them right and left with great strokes of the knife. "By thy life," saith the goddess, after having tasted blood, "when I slaughter men then is my heart right joyful."

In the *Book of the Dead* (before 1587 B.C.) the Ra of the dead asserts in his confessions that he has not been in anger, and says: "I have not put myself into anger. I have not been angry without a cause, I have not been enraged except from a cause. I have not been angry and wrathful except from a just cause. I am not hot of speech. I have never uttered

fiery words. I have not been a man of anger. I have not stirred up strife. I have not inflamed myself with rage. I indulge not in anger, I have not avenged myself. I have not been violent. I have not concealed anger. I have not caused terror."

In the papyrus of the scribe Ani, also called the papyrus of "Bulak," we find the following: "Do not reply to an irritated superior; keep thyself out of the way, speak gently to him who speaks when he is excited; it is a remedy for pacifying the heart."

Many Arabic and Persian sayings have been handed down to us, and the following are some of the translations: "Quench by thy mercy the fire of anger that a churl has recklessly kindled in thee, and pardon his trespass." . . . "When anger comes to thee on account of a person's crime, reflect much on his punishment, because it is easy to break the ruby of Badakhshan; broken, it is impossible to fasten it together again."

Wrath is a flame from Satan that proceeds :
Be not thou wroth, for wroth doth grief contain ;
Swallow thy rage, and 'twill be sweet to thee.
The lightning flashes but to give men pain ;
But aye to swallow is thy wont, O sea,
And hence thy breast is ne'er with dust o'erspread,
Though showers descend all stone-like on thy head.

Homer, the greatest of the Greek writers, has given us many pertinent observations on anger. Horace, in his satires, refers to anger in the statement, *Fœnum habet in cornu* ("He has hay on his horns"), and in his epistles he says, *Ira furor brevis est, Animum rege; qui nisi paret, imperet* ("Anger is momentary madness, so control your passion, or it will master you").

Seneca says that the man who lives with quiet people is not only improved by their example, but also by the fact that he finds no reason for anger, and does not practise his vice. It will, therefore, be his duty to avoid all those who he knows will excite his anger. A proud man will offend you by his disdain, a talkative one by his abuse, an impudent man by his insults, a spiteful one by his malice, a quarrelsome man by his wrangling, a braggart and liar by his vain-gloriousness, you will not endure to be feared by a suspicious man, conquered

by an obstinate one, or scorned by an ultra-refined one. Coelius, the orator, was the worst tempered man possible. It is said that once he was dining in his own chamber with an especially long-suffering client, who thought it best to agree to whatever he said, and to play second fiddle, but Coelius could not bear his obsequious agreement, and exclaimed, "Do contradict me in something that there may be two of us." With Socrates it was a sign of anger when he lowered his voice and became sparing in speech ; it was evident at such times that he was exercising restraint over himself. His friends, consequently, used to detect him acting thus, and convict him of being angry ; nor was he displeased at being charged with concealment of anger. Pythagoras used to calm his troubled spirit by playing on the lyre. Plato, when angry with his slave, could not prevail upon himself to wait, but straightway ordered him to take off his shirt and present his shoulders for the blows which he meant to give him with his own hand : then when he perceived that he was angry, he stopped the hand which he raised in the air, and stood like one in the act to strike. Being asked by a friend, who happened to come in, what he was doing, he answered, "I am making an angry man expiate his crime."

Aristotle termed those "cross-grained" who are angry at wrong objects, and in excessive degrees, and for too long a time, and who are not appeased without vengeance, or at least by punishing the offender. Aristotle thought it to be more excusable to follow such desires as are natural, just as it is to follow such lusts as are common to us all, and to that degree in which they are common. This was the ground of the defence the man made who beat his father : "My father," said he, "used to beat his, and his father his again, and this little fellow here," pointing to his child, "will beat me when he is a grown man : it runs in the family." Plutarch refers to the raising of the voice in anger, and states that this was the reason that Caius Gracchus, the orator, a man by nature blunt, rude in behaviour, and withal over-earnest and violent in his manner of pleading, had a little flute or pipe made for the nonce, such as musicians are wont to guide and rule the voice gently by little and little up and down, between base and treble, according to every note as they would themselves, teaching their scholars thereby to have a tunable voice. Now while Gracchus pleaded at the bar at any time, he had one of his servants standing with

such a pipe behind him, who, observing when his master was a little out of tune, would sound a more mild and pleasant note unto him, whereby he reclaimed and called him back from that loud exclaiming, and so taking down that rough and swelling accent of his voice dulced and allayed the choleric passion of the orator. Marsyas, the minstrel, devised a certain hood and muzzle fastened round about the mouth to restrain and keep down the violence of the blast enclosed thus by force, and also to correct and hide the deformity and undecent inequality of the visage.

"As for wine," says Plutarch, "if a man drink it of itself, undelayed with water, it putteth forth no such wantonness, no disordinate and loud speeches, like those that proceed of ire. For drunken talk serveth to make mirth and to procure laughter rather than anything else; but words of choler are tempered with bitter gall and rancour. Moreover, he that sitteth silent at the table when others drink merrily is odious to the company and a trouble; whereas in choler there is nothing more decent and beseeming gravity than to be quiet and say nothing; according, as Sappho doth admonish:

"When furious choler is up,
Disperst and spread in breast,
To keep the tongue, then apt to bark,
And let it lie at rest."

In advising delay in punishment, Plutarch refers to Phocian, who, after the death of Alexander the Great, having a care not to suffer the Athenians to rise over soon, or make any insurrection before due time, nor yet to give credit rashly unto the news of his death, said: "My master, of Athens, if he be dead to-day he will be dead to-morrow also, and three days hence too; even so, should a man (in mine opinion) who by the impulse of anger maketh haste to make punishment thus suggest and secretly say to himself: if this servant of mine hath made fault to-day, it will be as true to-morrow and the next day after."

Socrates, when he came from the wrestling school, took Euthydemus home with him to supper, but Xantippe, his wife, fell a chiding and scolding him at the board, reviling him with most bitter terms, so long, until at last, in an anger, down went the table and all that was upon it. Whereupon, Euthydemus

arose and was about to depart, but Socrates said : " Will you be gone ? Why, do you not remember that the other day, as we sat at supper in your house, there flew up to the board a hen, and did as much for you, and yet we were not offended nor angry for the matter."

Panatus teaches us to practise the example of Anaxagoras, who, when news came to him of his son's death, said, " I know well that I begat him a mortal man," so each one of us may sing this note to himself, " I knew well that when I bought this slave he was not a wise philosopher, neither was I ignorant when I took a wife that I wedded a woman."

When we come to Bible times the various views concerning anger become more frequent. In Proverbs we find : " He that is soon angry will deal foolishly. It is better to dwell in the wilderness than with a contentious and angry woman. Make no friendship with a man that is given to anger, and with a wrathful man thou shalt not go lest thou learn his ways. The north wind bringeth forth rain, so doth a backbiting tongue an angry countenance. An angry man stirreth up strife, and a wrathful man aboundeth in transgression " ; and in Ecclesiastes we find " Be not hasty in thy spirit to be angry, for anger resteth in the bosom of fools."

Epictetus (about 80 A.D.) was very emphatic in his views that we ought not to be angry with the errors or faults of others. Some of these views are, to say the least, quaint. He says : " Why then are we angry ? It is because we value so much the things of which these men rob us. Do not admire your clothes, and then you will not be angry with the thief. Do not admire the beauty of your wife, and then you will not be angry with the adulterer. Learn that a thief and an adulterer have no place in the things which belong to others, and are not in your power. If you dismiss these things and consider them as nothing, with whom are you still angry ? But so long as you value these things, be angry with yourself rather than with the thief and the adulterer." In the works of Lactantius (about 315 A.D.), and especially in his *Treatise on the Anger of God*, is to be found the opinion of the Stoics concerning the anger and kindness of God. The Stoics and some others are supposed to have entertained the sentiment that there is kindness in God, but not anger, and that God is not subject to such littleness of mind as to imagine that He is

injured by anyone, since it is impossible for Him to be injured. To be excited, disturbed, and maddened, is the part of human frailty. For anger is a commotion and perturbation of the mind, which is inconsistent with God. The Stoics did not see that there is a distinction between right and wrong, that there is a just and unjust anger. Epictetus gives a long dissertation on the subject and criticises at length the opinions of other writers.

In Hannay's book on *The Wisdom of the Desert* we find many interesting observations on anger. "Nothing so stills the elephant when enraged as the sight of a lamb; nor does anything break the force of a cannon-ball so well as wool. Correction given in anger, however tempered by reason, never has so much effect as that which is given altogether without anger; for the reasonable soul, being naturally subject to reason, it is a tyranny which subjects it to passion, and whereinsoever reason is led by passion it becomes odious, and its just rule obnoxious." "To try and cure another of sin by angry denunciation was the same thing as for a physician to try to cure his patient by inoculating himself with a similar fever, for to be angry even with sinfulness is to sin."

Sallust refers to the opinion of Cæsar: "It becomes all men, Conscript Fathers, who deliberate on dubious matters, to be influenced neither by hatred, affection, anger, nor pity. The mind, when such feelings obstruct its view, cannot easily see what is right, nor has any human being consulted at the same moment his passions and his interest."

I would like to quote from Francis Bacon's *Essays, Civil and Moral*, from the writings of St. Francis de Sales, also from the works of Newton, Thomas Rogers, Clement, Del'Repine, Bryskett, St. Gregory the Great, St. Ambrose, and many other of the early writers, but I must content myself with a brief reference to the *Bhagavadgita*, an ancient Hindu book, which points out the way to hell as being threefold—through lust, anger, and avarice. The *Artharva-Veda*, as recorded in the religions of India, is also of great interest. The *Rig-Veda* goes back to about 2000 to 3000 B.C., then follows the *Artharva*, which represents a growing demonology in contrast with Soma-worship and theology. In the hymns of the *Artharva-Veda* we find an account of charms to secure harmony, influence in the assembly, and the like. "Do ye take delight in one another, as a cow in her calf?"

It has often been pointed out that not only the practices involved, but the hymns themselves, in the *Atharvan*, may have existed for a long period before they were collected, and that while the *Atharvan* collection, as a whole, takes historical place after the *Rig-Veda*, there yet may be comprised in the former much which is as old as any part of the latter work. The fourth *Veda* is known in Hindu literature by an unusually large number of appellations. The *Atharvan* is a sacred text in more than one respect, and many of its hymns and practices are benevolent. It consists of charms to secure harmony, influence in the assembly, and the like; charms to allay discord, charms against strife and bloodshed. The magic power of "darbhagras" is employed to appease wrath, and, according to Kaus, the grass is dug up and fastened on as a talisman.

In the works of St. Ambrose, about 380 A.D., there is also much excellent advice. "Regard not the return made thee by others. Hold thy ground, guard the simplicity and purity of thy heart. Answer not an angry man according to his anger, nor a foolish man according to his folly. One fault quickly calls for another. If stones are rubbed together, does not fire break forth?"

In the library of the Nicene and Post Nicene Fathers (about 400 A.D.) there are many observations of great interest, and St. Basil does not omit to notice that there may be such a thing as righteous indignation. Of the later writers on the subject of Anger I may mention St. Thomas Aquinas, Peter de la Primandaye, James Hart, Leonard Merrande, Gent, Palfrayman, John of Damascus, Cassian, and many others.

The student of Shakespeare will find in his works many allusions to anger. With his increasing power in dealing with the structure of a plot and in representing the deeper passions of humanity, his experience of life, aided, as I believe, by literary research, enabled him to extend his sphere of thought and imagination until his capacity for characterisation became so varied and profound that the work of the apprentice resolved itself into the art of the master. Certain it is that in his later works his intellect seems to have risen until it overshadowed his whole life, and mere technicality was replaced by genius.

In his mode of delineating passion and feeling Shakespeare towers above all other dramatists. The men and women of

Shakespeare's stage are pre-eminently human, and, although one single quality or passion may appear to predominate, when we attempt to comprehend the whole extent of its individuality the complexity of its moral being goes on widening and deepening, and his conceptions are as multiform as those of Nature herself. Every grade of folly, every shade of moral perturbation, from the jealous fury of Othello to the pitiful frenzy of Lear, or the supremely sorrowful sadness of Ophelia, is represented in his plays with a sublime realism which is always true to life and Nature.

I have referred elsewhere to the encyclopædic work by Bartholomæus Anglicus (translated, 1397 A.D.) which contains the signature "William Shakespeare, his book," and the writings of Bartholomæus on the subjects of the "vertue vitall," "diverside of pulses," "coler," "madness, and the causes and signs thereof," as viewed in the light of Shakespeare, form a study of the deepest interest.

These early writings could easily, and without any stretching of the imagination, be applied with benefit to the tendencies of the present day. And as it is with units so it is with communities. Loss of control is but a relic, not merely of barbarism, but also even of atavistic reversion to the primitive stage of evolution, before brute force and violence were replaced by self-control and reason. The foundations of international polity, as propounded in Norman Angellism, might in very truth be extended in their scope so as to include an elaboration of an elementary yet certain truth, *viz.*, as in the process of evolution from brutality to civilisation the canine teeth and claws have tended gradually to disappear, by atrophy from disuse, so, in due course, as facilities for inter-communication, identity of interests, and stability of conduct, become more evident, will armaments ultimately give way to amity and reason. As it is with individuals, so it is with communities, and it requires but little penetration to see that anger affects most injuriously him who weakens his power by using it. "It is," as Seneca says, "worse than luxury, because luxury enjoys its own pleasure, while anger enjoys another's pain. Nothing is more ruinous than war; it is the outcome of powerful men's anger; and even the anger of humble private persons, though without arms and armies, is, nevertheless, war. Moreover, if we pass over its immediate

consequences, such as heavy losses, treacherous plots, and the constant anxiety produced by strife, anger pays a penalty at the same moment that it exacts one."

These considerations prompt me to offer the proposition that anger, occurring in mankind, is phylogenetically an expression of an atavistic reversion or retrogression, whilst ontogenetically considered it is also an indication of individual and familial devolution.

To run amok.

The amok of the Malays has been regarded as a disease confined entirely to individuals of that race, and it is, perhaps, the most interesting of all the mental disorders of the Orient. It never affects women (H. J. Berkley, *Mental Diseases*, 1909, p. 574). The fury is attributed by various writers to opium, hasheesh, sunstroke, jealousy, but not to alcohol—alcohol being shunned by the Malays. Amok is a Malay word, and means furious assault. A Malay who runs amok without any prodromal symptoms suddenly rushes, in a state of blind rage, through the streets, and in his furious homicidal passion stabs right and left at man, woman, or child, relation, friend, or stranger, without distinction. It is of interest to note the words of the sentence passed on the Malay, named Sunam, who ran amok, and succeeded in killing an old Hindu woman, a Kling man, a Chinese boy, a Kling girl, about eight years old, who was in the arms of her father, and in wounding two Hindoos, three Klings, and two Chinese, of which seven persons only two ultimately survived. Sir Wm. Norris (the Chief Justice) passed sentence on the prisoner in these words (Dr. W. Gilmore Ellis, "The Amok of the Malays," *Journ. Ment. Sci.*, July, 1893): "Sunam, you stand convicted on the clearest evidence of the wilful murder of Pakir Sah on Wednesday last, and it appears that on the same occasion you stabbed no less than ten other unfortunate persons, only two of whom are at present surviving. It now becomes my duty to pass upon you the last sentence of the law. I can scarcely call it a painful duty, for the blood of your innocent victims cries aloud for vengeance, and both justice and humanity would be shocked were you permitted to escape the infamy of a public execution. God Almighty alone, the great searcher of hearts, can tell pre-

cisely what passed in that wretched heart of yours before and at the time when you committed these atrocious deeds, nor is it necessary for the ends of justice that we should perfectly comprehend the morbid views and turbulent passions by which you were actuated. It is enough for us to know that you, like all other murderers, had not the fear of God before your eyes, and that you acted of malice aforethought, and by the instigation of the devil himself, who was a murderer from the beginning. But all the atrocities you have committed are of a peculiar character, and such as are never perpetrated by Christians, Hindoos, Chinese, or any other class of Mohammedans, especially Malays, among whom they are frightfully common, and may, therefore, be justly branded, by way of infamous distinction, as Mohammedan murders. I think it right, therefore, seeing so great a concourse of Mohammedans in and about the Court to take this opportunity of endeavouring to disabuse their minds and your own of any false notions of courage, heroism, or self-devotion, which Mohammedans alone, of all mankind, can ever attach to such base, cowardly, and brutal murders; notions which none but the devil himself, the father of lies, could ever have inspired. But if such false, execrable, and dangerous delusions really are entertained by any man, or body of men whatever, it may be as well to show from the gloomy workings of your mind, so far as circumstances have revealed, that not a particle of manly courage or heroism could have animated you, or can ever animate any man who lifts his cowardly hand against helpless women and children. You had lately, it seems, been greatly afflicted by the sudden deaths of your wife and only child, and God forbid that I should needlessly harrow up your feelings by reverting to the subject. I do so merely because it seems in some degree to explain the dreadful tragedy for which you are now about to answer with your life. Unable or unwilling to submit with patience to the affliction with which it had pleased God to visit you, you abandoned yourself to discontent and despair, until shortly before the bloody transaction, when you went to the mosque to pray. To pray to whom, or to what? Not to senseless idols of wood and stone, which Christians and Mohammedans equally abominate, but to the one omniscient, almighty, and all-merciful God, in whom alone Christians and Mohammedans profess to believe. But for what did you pray,

if you prayed at all? Did you pray for resignation or ability to humble yourself under the mighty hand of God? Impossible. You may have gone to curse in your heart and gnash with your teeth, but certainly not to pray, whatever unmeaning sentences of the *Koran* may have issued from your lips. Doubtless you entered the mosque with a heart full of haughty pride, anger, and rebellion against your Maker, and no wonder that you sallied forth again overflowing with hatred and malice against your innocent fellow creatures: no wonder that, when thus abandoned to the devil, you stabbed with equal cruelty, cowardice, and ferocity, unharmed and helpless men, women, and children, who had never injured, never known, probably never seen you before. Such are the murders which Mohammedans alone have been found capable of committing. Not that I mean to brand Mohammedans in general as worse than all other men, far from it; I believe there are many good men among them, as good as men can be who are ignorant of the only true religion. I merely state the facts that such atrocities disgrace no other creed, let the Mohammedans account for the fact as they may. But whatever may be the true explanation, whether these fiendish excesses are the result of fanaticism, superstition, overweening pride, or, which is probable, of all combined, public justice demands that the perpetrators should be visited with the severest and most disgraceful punishment which the law can inflict. The sentence of the Court, therefore, is that you, Sunam, be remanded to the place from whence you came, and that on the morning of Wednesday next you be drawn from thence on a hurdle to the place of execution, and there be hanged by the neck until you are dead. Your body will then be handed over to the surgeons for dissection, and your mangled limbs, instead of being restored to your friends for decent interment, will be cast into the sea, thrown into a ditch, or scattered on the earth, at the discretion of the Sheriff, and may God Almighty have mercy on your miserable soul."

With regard to the case just described, Dr. Wm. Gilmore Ellis suggests that the verdict seems to have been given under the impression that amok has something to do with Mohammedanism, that the murder of infidels (*i.e.*, non-Mohammedans) is advocated or at least spoken well of in the *Koran*, and that to be killed running amok is a sure road to Heaven. Unfortu-

nately, amok is not by any means a peculiarity of the Malay race, and did the *Koran* commend such an action, amok would be of daily occurrence among such bigoted Mohammedans as many of the Malays are. Two sentences from the *Koran* are quoted, *viz.*, "And fight for the religion of God against those who fight against you, but transgress not by attacking them first, for God loves not the transgressors," and again: "Let there be no violence in religion." "Moreover," says Ellis, "a Malay is no respecter of persons when amoking. He stabs members of his own race and religion, should he come across them, with the same indifference with which he would stab others, an action he would certainly not commit were the *Koran* or his religion in any way the cause of the outbreak." Concerning such a crime the *Koran* says: "But whoso killeth a believer designedly his reward shall be hell, he shall remain therein for ever; and God shall be angry with him, and shall curse him, and shall prepare for him a great punishment." Again, there is thought to be evidence to show that amok was prevalent before their conversion to the Mohammedan religion. In any case, we now know that amok is by no means confined to the Malays. Medical jurists are well acquainted with instances of irresponsible persons who run amok quite independent of race or creed.

The Malay is, like other people, apt to brood over his wrongs, or supposed wrongs, with revengeful feelings to which the name of "Sakit-hati" (heart-sickness) is given. The condition is analogous to sulking, and having occasional outbursts of wrath. This sulkiness is followed in amok by sudden and uncontrollable impulses. The question of responsibility arises, and it is a moot point as to whether they ought to be punished. Ellis holds that those who wilfully work themselves into a blind rage and then run amok, although they might be quite unconscious as to their actions while running amok, should, to a certain extent at least, be held responsible for their actions, for they must thoroughly understand what is likely to be the result of that first wilful action. As a man, who of his own free will makes himself drunk, and in a blind drunken rage, more or less unconscious of his drunken actions, commits a crime, is responsible, so are they. The medico-legal bearings of these cases are still controversial, and, unfortunately for the claims of justice, the law of England is still guided by the early Victorian rulings of

Macnaughten. For our purpose we have to note that not only is amok not confined merely to the individual Malay, but it also affects individuals of other nationalities, and, moreover, when it affects individuals of influence and authority over groups of people or communities the amok is apt to assume the proportions of an epidemic of maniacal fury, in which even nations pass into furious homicidal passion, and become a grave danger to civilisation.

History abounds in innumerable instances of amok arising endemically and sporadically in epileptic and dangerous homicidal rulers, and propagated by officers and dependents as waves of unspeakable cruelty and destruction of human life. Such psychopathic epidemics, whilst clearly traceable to their despotic origins, differ somewhat in their medico-psychological aspects from the types which have their origin in megalomania and paranoia of persecution, inasmuch as, whereas the ruler may be running amok, the emissaries are merely seized with the fury of homicide, and are clearly cognisant of their actions. The monomania of power, and the train of psychical events engendered therefrom, suggests another series of considerations. To the late Dr. William W. Ireland (*The Blot upon the Brain*) we are indebted for interesting studies of the abnormal mental characteristics of men who have played great parts in the moulding of the destinies of nations.

With regard to Mohammed, he found it difficult to explain the pretensions, and at the same time to uphold the sincerity, of that remarkable man. Instances where mere politicians have resorted to religious impostures as temporary expedients to advance their ends have been common, but to Mohammed a contrivance of this kind is a very different thing from the foundation of a religion which now numbers about a hundred and forty millions of votaries, and which possesses to this day a very singular power over the minds of its followers.

By the persistent claim of being a messenger from God, Mohammed made himself master of the greater part of Arabia, and roused a mighty religious movement which continued after his death. In a few years more a number of wandering tribes, who had no more cohesion than the land of their deserts, had run a mighty career of conquest, which bore them to the banks of the Loire and of the Oxus. It is generally admitted that men cannot excite in others feelings

which are wanting in their own breasts. The old notion that Mohammed was a mere impostor is difficult to believe, in spite of the difficulty to explain how Mohammed in good faith could have said that he had seen the angel Gabriel, and heard voices from Heaven calling him the Messenger of God, and revealing chapter after chapter of the *Koran*. Sprenger, in his life of Mohammed (*Das Leben und die Lehre des Mohammed nach bisher grossentheils unbenutzten Quellen bearbeitet*, von A. Sprenger, Berlin, 1861), advanced the theory that Mohammed was subject to some nervous disease accompanied by hallucinations, and he has recorded several traditions about the first revelations of Mohammed which began with visions in his sleep. The angel came to him and said: "Read, in the name of the Lord who has created you. He has created men from blood. Read; the Lord is the greatest who has taught men. He has taught men by writing what he did not know." In the *Koran* his interviews with Gabriel are rather alluded to than described, and, according to some of these accounts, after the first interview with the angel, there was a very long silence, and Mohammed was so much troubled in mind that he went sometimes to Mount Thabyr, and sometimes to Mount Hira, with the thought of throwing himself over a precipice. Sir William Muir (*The Life of Mohammed*, by Wm. Muir, vol. ii, p. 378, London, 1858) remarks that it is a question of great interest whether the ecstatic periods of Mohammed were simply reveries of profound meditation, or swoons connected with a morbid sensibility of the mental or physical constitution.

Gibbon tells us, in a note to the *Decline and Fall*, that the epilepsy or falling sickness of Mohammed is asserted by Theophanes, Honoras, and the rest of the Greeks, but that he himself considered the silence with regard to the subject by the Mohammedan commentators to be more conclusive than the most peremptory denial. Evidently the great historian did not know Arabic, and was ignorant of the traditions reproduced by Sprenger. Deutsch (*Literary Remains of the late Emmanuel Deutsch*, London, 1874, Islam, p. 82) admits with regard to Mohammed, "There is a peculiar something supposed to inhere in epilepsy. The Greeks call it a sacred disease. Bacchantic and Corybantic *furor* were God-inspired stages."

Undoubtedly, epilepsy, especially when the fits are frequent, is a malady which is often most destructive to mental force and soundness of thought. On the other hand, as is well known, cases are not infrequent, especially where the disease has appeared after puberty, where there is no observable injury to the mental powers ; in others the mind is little affected, or the patient may be simply capricious or irritable. In some rare cases, instead of mental enfeeblement, the reverse is noticed. With some epileptics the intellectual faculties are excited, they are men of talent, sometimes men of genius (*Leçons sur les Maladies Mentales*, par B. Ball, Professeur à la Faculté de Médecine de Paris ; Paris, 1880-1883, p. 504). Dr. Howden ("The Religious Sentiment in Epileptics," by James C. Howden, M.D., *Journal of Mental Science*, January, 1873) has remarked that in epilepsy there is often an exaltation of the religious sentiments, generally without any corresponding strictness of morals. Dr. Toselli ("Sulla Religiosità degli Epilettici," Studio di Enrico Toselli, *Archivio Italiano*, Anno xvi, Fasc. ii, Milan, 1879) says that of all diseases epilepsy is the one in which morbid manifestations of the religious sentiments are oftenest observed. All the writers who treat of the intellectual and moral disorders of epileptics have commented on their morbid religiosity, which is all the more remarkable as it is often in contrast with their habitual conduct, some of them being vicious in the highest degree (Ireland, *op. cit.*, p. 40).

The success of Mohammed's mission rests in reality in the character of the man, and the circumstances of the times. He showed great activity in war ; he led twelve military expeditions, underwent much exposure, and was many times in extreme danger. Mohammed was undoubtedly deeply religious, and his mind had outgrown the polytheism and idolatry of Mecca, but nevertheless he felt himself to be in possession of truths which raised him above the stupid idolatry of his fellow citizens. One thing is clearly evident, and that is, that in ancient times, and amongst half civilised nations, things were done in the name of religion which none but men of the weakest mental structure would now do.

Initial force so generated and propagated as a wave of aggression may serve its immediate purpose, but no matter how strong the motive, rapid the impetus, or destructive the

impact, the trend of humanity is inevitable, and fixed by greater laws than man can compass or direct.

“ Far out upon the waters dark
Each tiny silvered crest appears
To gather impetus to mark
Its advent in the storm and strife,
As human beings born to life
But rise to fall against the rocks
Of endless turmoil, and return
Unto the depths from which they come.
Tho’ man shall blow his loudest blast,
For good or ill, his life must pass
Thro’ silent death to dust at last.
And everywhere the loudest din
Marks but the place where surging in
Each life-wave ends mid foam and swirl,
Or seething back again is hurl’d
On this, at most, a silent world.”

The motives for war possessed by Mohammed were in a sense benign, and quite different from those which actuated Ivan the Terrible and others to slay indiscriminately. The world has witnessed many such epidemics of slaughter, some benign, others malign. But of all the instances on record none can compare with those of the Prussian Potentate who has animated the present disruption of civilisation. Even though a constitutional monarchy may sanction the adoption of the methods of a criminal anarchy, posterity will decide inevitably in favour of humanity, and it is only a question of time as to when this present *cancrum mundi*, malignant though it be, shall be uprooted and dissected in its every branch from human life and experience.

At the beginning of this war Mr. Bonar Law quoted a well-known saying of Burke, “You cannot bring an indictment against a whole nation,” and quite recently he said: “I am not sure that that saying is true now.” He further added that “it may be that Germany is simply running amok, and that these are the deeds of a desperate nation, with method in its madness.”

The indictment of posterity is inevitable, and the exposure of the minds and methods at the Germanic fountain-head of so many psychopathic epidemics, such as those of the Middle

Ages, the psychopathic sexualis, and the inhuman misuse of power, will prove that the *débacle* of this era is merely another instance of an epidemic psychopathy, a repetition of which humanity will never permit.

It is of interest to note that during the sixteenth and seventeenth centuries the Rosicrucians of Germany disseminated fantastical doctrines, which ran away with the sound judgment of many clever but too enthusiastic searchers for truth. When alchemy was becoming regarded as a grovelling delusion the Rosicrucians (they are said to have derived their name from Christian Rosenkrantz or "Rose-Cross," a German philosopher, who travelled in the Holy Land towards the close of the fourteenth century) enlarged their views, and supposed the possession of the philosopher's stone to confer not only the means of wealth, but of health and happiness, and the instrument by which man could command the services of superior beings, control the elements to his will, defy the obstructions of time and space, and acquire the most intimate knowledge of all the secrets of the universe.

Rosenkrantz was vaunted as the regenerator of the human race, and his followers held the following beliefs, *viz.* : that they were destined to accomplish the general peace and regeneration of man ; that they possessed all wisdom and piety in a supreme degree ; that they possessed all the graces of nature, and could distribute them among the rest of mankind according to their pleasure ; that they had the same knowledge then which they would have possessed if they had lived from the beginning of the world, and had always been acquiring it ; that, by virtue of their songs, they could attract pearls and precious stones from the bowels of the earth ; that God had covered them with a thick cloud, by means of which they could shelter themselves from the malignity of their enemies, etc., etc. Their rules of conduct were such that no man thought himself secure of his goods, no maiden of her virginity, or wife of her chastity, while the Rosicrucians were abroad, and in due course a book was published on *The Frightful Compacts entered into between the Devil and the pretended "Invisible" ; with their damnable Instructions, the deplorable Ruin of their Disciples, and their miserable end.* In the reports of the doings of the Rosicrucians it is stated that, although well inclined to befriend mankind, the want of a soul rendered them capricious and

revengeful ; they took offence on slight causes, and heaped injuries instead of benefits on the heads of those who extinguished the light of reason that was in them by gluttony, debauchery, and other appetites of the body.

To Seneca are we indebted for an account of the phenomena of anger : " It passes over no time of life," says Seneca ; " no race of men is exempt from it ; some nations have been saved from the knowledge of luxury by the blessing of poverty ; some, through their active and wandering habits, have escaped from sloth ; those whose manners are unpolished and whose life is rustic know not chicanery and fraud and all the evils to which the courts of law give birth ; but there is no race which is not excited by anger, which is equally powerful with Greeks and barbarians, and is just as ruinous among law-abiding folk as among those whose only law is that of the stronger. The other passions seize upon individuals : anger is the only one which sometimes possesses a whole State. No entire people felt madly in love with a woman, nor did any nation ever set its affections altogether upon gain and profit. Ambition attacks single individuals : ungovernable rage is the only passion that affects nations. People often fly into a passion by troops : men and women, old men and boys, princes and populace all act alike, and the whole multitude, after being excited by a very few words, outdoes even its exciter ; men betake themselves straightway to fire and sword, and proclaim war against their neighbours, or wage one against their countrymen. Whole houses are burnt with their whole families which they contain, and he who but lately was honoured for his popular eloquence now finds that his speech moves people to rage. Legions aim their darts at their commander ; the whole populace quarrels with the nobles ; the senate, without waiting for troops to be levied or appointing a general, hastily chooses leaders, for its anger chases well-born men through the houses of Rome, and puts them to death with its own hand. Ambassadors are outraged, the law of nations violated, and an unnatural madness seizes the State. Without allowing time for the general excitement to subside, fleets are straightway launched, and laden with a hastily enrolled soldiery. Without organisation, without taking any auspices, the populace rushes into the field guided by its own anger, snatches up whatever comes first to hand by way of arms, and then atones by a great defeat for the reckless audacity

of its anger. This is usually the fate of savage nations when they plunge into war."

Doubtless all have read the striking letters of the Archbishop of Canterbury and the Prime Minister on the new temper of Great Britain.

In a letter to the Prime Minister the Archbishop of Canterbury, referring to the nature of the fight Britain has to wage against the "unbridled forces of cruelty and wrong," says :

"The wrath with which these things have inflamed our people seeks utterance in action. Such action may take contemptible shape, as in the senseless outbreaks which have disgraced some of our streets, and which call for the stern punishment of those to whose ungoverned or greedy temper they are due. Or, again, it may take shape in a desire to retaliate, as in the case of noxious gases, by ourselves using the same infamous weapon. Most earnestly do I trust that we shall never anywhere be induced or driven to a course which would lower us towards the level of those whom we denounce.

"Our righteous wrath is taking worthier form in the deepening and quickening of our resolve to throw our every ounce of strength into the fight, and to grudge or withhold nothing which can bring about its speedier ending in a victory for the cause of what is honourable in the sight of God and men. We have given freely.

"But there are great veins of service which are still untapped . . . Upon those who are precluded by age or health or circumstances from joining the combatant forces, we invite you to call without hesitation for such aid as they can render by brain or hand, by voice or pen. We await your call, whenever and wherever the occasion bids you make it."

The Premier, in reply, sent the following letter to the Archbishop :

"The new developments on the part of our enemy, to which you refer, in the scientific organisation of barbarism, coupled with the demonstration, by the report of Lord Bryce's Committee, that cruel and wanton outrage was, from the first, a weapon deliberately employed by the German General Staff, have aroused in our people a temper of righteous and consuming indignation for which, I believe, there is no precedent or parallel in our national history.

“ ‘Let not the sun go down upon your wrath’ is a precept which rebukes the petty, personal, unreasoning, quarrels of social and national life. But it has no application when the issue is such that freedom, honour, humanity itself, is at stake.

“ I, therefore, heartily welcome your suggestion that the Church and the responsible leaders of religious opinion and feeling should enforce what has become the primary duty of every subject of the King—to contribute loyally, and without any reserve, any and every form of service to the greatest and worthiest cause in which either the fortunes or the conscience of the Empire have ever been engaged.”

The psychology of modern warfare has yet to be written. When divested of its bearings on political economy and biological evolution (from the point of view of its elimination of males who are best fit to propagate), it will readily be seen that the wholesale slaughter is largely a question not only of individual courage and endurance, but also of craftiness and cunning, against which courage and physical fitness avail but little.

Of the causes, symptoms, and methods of treatment of anger as coming within the purview of the medico-psychologist it is needless to say much. We are all acquainted with hereditary types of defective inhibition, with uncontrollable impulses in the course of mental affections, with the toxic and epileptiform furies, and with homicidal manias. We know the influence of suggestion both in the waking hours and during sleep, when subconscious activities precede the getting up “on the wrong side of the bed.” We know also the influence of example both familial and national, and we note the manifestations of anger objectively as being psychopathic. With regard to treatment, however, we are as yet somewhat ignorant and of diverse opinion. Some conjectures have been made as to the pathology, both metabolic and regional, but we are as yet unable to formulate any theories which are susceptible of demonstrable proof.

(1) A paper read before the Medico-Psychological Association, Quarterly General Meeting, London, May 18th, 1915.

The Catatonic Type of Dementia Præcox :

The Genesis of the Auto-intoxication in the Catatonic Type of Dementia Præcox, from an Hereditarily Transmitted Defective Biochemism. By G. DUNLOP ROBERTSON, L.R.C.P. and S. Edin., M.P.C., Dipl. Psych. Edin., Senior Assistant Physician, Lanark District Asylum, Hartwood.

Argument.

That there is a history of hereditary defect attached to the great majority of cases of dementia præcox.

That this is really a biological defect which first becomes manifest in the most highly organised and differentiated tissues—the neuronics.

That this neuronics defect may, in youth, be latent to a varying degree, though sometimes fairly patent as “peculiarity of mental make-up.”

That the biological defect may not extend to the more rudely constituted somatic cells or cell groups.

That the somatic cell groups developing healthily, a disparity of vigour between them and their representative neuronics cell groups will become greater and more obvious on full ontogenetic development in adolescence.

That on attainment of puberty, and the consolidation of adolescence, an additional factor makes its appearance on the scene in the form of fully developed sex (glandular) organs.

That their additional and vigorous appeal, or reaction (which in itself is one of Nature's most powerful interactions), on their respective cerebral neuronics representatives—neurones which are relatively potentially weak—is such that they must suffer strain in their endeavour to meet this call with a corresponding vigour of inhibition, or with that reciprocal, dynamically stable, and harmonious balance of nerve-centre potential which physiological health demands.

That the mental processes in ideation, reflected from this condition of physiologically strained neurones, will be burdened with a corresponding “affective” strain or tension.

That this tension of affect, as a tension, is, as it were, “pain-

ful" of content, therefore "repressions," "transferences," "subliminations," "disguises," etc., will occur.

That this permits momentary "satisfaction" of tension.

That this vicious stream of "affective" tension is subject to continuous addition.

That the whole process of "transference," "disguise," etc., is unknown to the patient—is subconscious.

That an accumulation of affective tension, or subconscious emotion, is brought about.

That the physiological channel of outlet for subconscious emotions is the sympathetic nervous system.

That the chromaffin cells, being developmentally closely associated in origin with the sympathetic nerve-cells, will feel the hereditary biological handicap almost, if not quite, as severely as the neuronics.

That they will, therefore, exhibit a relative "irritability" of weakness."

That this will be revealed, on stimulation, as a functional hypersecretion.

That the secretion of the chromaffin cells is adrenalin.

That the sympathetic innervates the chromaffin cells.

That there will, therefore, be a hypersecretion of adrenalin.

That adrenalin is a vaso-constrictor, and also a toxin.

That in hebephrenia there is a cerebral anæmia from vaso-constriction brought about by excessive secretion of adrenalin.

That in catatonia there is a cerebral and general somatic toxæmia, induced by greater excess of adrenalin output (the clinical picture of cerebral anæmia from vaso-constriction being overwhelmed by that of neuronics and muscular toxæmia).

That a qualitative test of catatonic dementia præcox blood-serum for adrenalin is affirmative.

That this test reveals, in addition, a quantitative excess of adrenalin.

I. *The Genesis of the Auto-intoxication in the Catatonic Type of Dementia Præcox, from an Hereditarily Transmitted Defective Biochemism.*

"Insanity has always a biological basis."⁽¹⁾ "We are not pardoned in even considering mind disturbances in terms of brain structure alterations, much less in terms of remote

physical disease"(2), nor can we condone the assertion that psychic factors alone, *per se*, are genetic; for we must remember that "psychic activity is the manifestation in consciousness of physiological phenomena," and "that our intellect is but a refinement of primary biological emotions"(3), "bio-chemic, and therefore essentially somatic"(4).

Referring to the origin of amentia, Tredgold says that it is "due, not to the absence or suppression of some specific germ determinant, but is the result of a diminished germinal vitality, in consequence of which development tends to be incomplete." "This lessened potentiality," he says, "is especially marked in that constituent which determines the development of the central nervous system—the neuronc determinant—but it is often more widespread, and then affects other tissues of the body also. In other words, the inheritance takes the form of a neuropathic diathesis, or an innate predisposition to neuronc imperfections; the actual manifestation of this innate weakness, however,—that is, the form it assumes—being often dependent upon the nature of the environment"(5).

The impairment or vitiation of some healthy normal germ-plasm back in the ancestral line would be due to untoward environmental surroundings. Weissman, we know, now admits the possibility of "adverse environmental influences acting directly upon the germ-plasm." As Ward (32) puts it: "If it is once admitted that the body influences the germ-plasm in one way—*i. e.*, by way of nutrition—the possibility of its influence in other ways can hardly be denied." Germ-plasm is not immutable.

Tredgold maintains that "there is the clearest evidence that the germ-plasm does undergo modification by environment, and that the manifestation of a pathological germinal variation produced by environment is, in the beginning, in most instances, in a diminished function and durability of the higher cerebral neurones, and therefore an increased excitability of lower, revealed clinically as neurasthenia, hysteria, and milder forms of epilepsy. Should the adverse environment continue, or should a person so affected mate with one similarly tainted, then in the next generation neuronc durability would be further diminished, and the instability accentuated, so that insanity, the graver forms of epilepsy, and early dementia, make their appearance."

It is interesting, in regard to this subject of germ-plasm variation to note that Wolfsohn finds alcoholism in 25 *per cent.* of dementia præcox parentage, and that dementia præcox is frequent in the descendants of general paralysis of the insane and tabetics. Berthelot finds that the hurtful influence of alcoholism upon the sexual glands is not to be denied.

"We do not know the exact *modus operandi* of these deleterious agencies, whether directly toxic on the neuronics determinants, or indirectly by deprivation of essential food constituents" (5).

It is said that 70 *per cent.* of cases of dementia præcox give a definite history of ancestral neuropathy. There will, therefore, in dementia præcox, be innate weakness of neuronics potentiality. There will be lessened potentiality, or diminished vitality, of the cerebral cortical neurones. This weakness will tend eventually to become manifest, especially, on the "feel" of the first tension of the full strength and completion of ontogenetic development—adolescence. And, undoubtedly, it would appear that "the great majority of cases of dementia præcox originate in persons under 25 years of age" (Singer) (6). The hardier, if more grossly constituted, non-neuronic, somatic cells will functionate with a more normal healthy vigour, at least in comparison with the neuronics. Beginning with the development of puberty, and during the later sex consolidation of adolescence, cell groups of the body organs pertaining thereto will, through the "call power" of their hormones, react with normal strength and appeal on their specific, sensitive, but vitally deficient cerebral neurones, which, in their endeavour to respond adequately (as they would otherwise have been able to do), will suffer a relative strain or tension, which, again, will be reflected in their functional psychic elaborations and manifestations, with a similar quality of affective tension or strain. This very excess of affective tension will cause the ideational groups to which they belong to be rejected as "painful," or overtensioned by the psychical processes, subjected to the mechanism of "repression," and forced down into the "subconscious." No "affect" can, as it were, breathe below the surface, and if of strong character an affect will "fling off" from her complex, catch hold of some other that can swim, and whose "affect" is too weak to resist, and thus come up to the surface of consciousness,

where she will strongly discourage any diving proclivities in her new partner complex. Thus many complexes come continually to the surface bearing with them these false, though fair, affects whose sparkling vitality keeps drawing upon them "the inner eyes" of our patients in the dalliance of "day-dreaming." Day-dreaming has as basis a process of undirected recollecting, and it is the excess of "affective colouring" attached thereto that charms the mind away from the controlling influence and selective power of judgment. Thus in day-dreaming the subject is absorbed, "shut in" with greater interests, "shut in" from outside interests, has not the mind and time to spare for outside things, and so appears to have defective volition; nothing external "touches" him, and so to him emotional vacuity is ascribed. The elaboration and organisation of these highly affective-toned complexes creates an emotional "field" that is continually being added to, till a "flooded field" of emotional tension is created. This tension would "well" over, escaping in conscious motor acts of relief, were he in touch with his environment, but this the "shut in" patient is not. The emotional tension must, therefore, drain away subconsciously through its physiological channel—the sympathetic.

Leaving things here, for a moment, as I have stated them, I would enforce that, while subscribing to the conception that insanity grows only in a soil of biological defect, I do also assert that psychic experiences are not only minor aids to this untoward development, but that they are, in truth, powerfully accessory. We have already noted the concession that environment can influence germ-plasm. I would now emphasise the opinion that psychical experiences in stormy or stressful environmental conditions can so bend and warp the delicate growth and form of a "psyche" springing from poor biological soil, as to render it, as it were, a bent and twisted thing—what one would, at a glance, call "unsound."

The mental qualities, previous to the advent of dementia præcox in adolescence, may be ordinary, or less so, but often quite acute and of fair promise. When the elasticity and pliant stretch of them suddenly ends with the strain of the approach and consummation of adolescence (through fundamental biological reasons, of which the patients themselves are unaware), the ambitious and laudable desires of life are checked

in their first full impetus and stride. Effort, on the part of the patient or "neuropath" at this time "not to feel inferior to, but to rise to the level of, his companions" (Adler) (7) will, in the light of a "stress," lead to false adjustments and repressions. The glowing fires of the affects of the natural ambitions and desires inseparable from the halcyon days of adolescence are then "transferred" to be laid unquenched on the altars of other ideational complexes with their constellations—strange gods these, and wholly unbeneficent. The law of the continuity of life has seen to it that living matter is permeated with a commanding instinct to its service. We should then expect the affect attached thereto to be also great and masterful. It is not surprising that Bleuler (8) should find, through methods of psycho-analysis, that "in most patients the complexes were sexual" (to bring out the full tone and register of this word one must use the bow of a flexible understanding, running up even to the highest and most delicate notes of a timorous romanticism), and that "numerically the complexes furnished by sexuality were greatest in nearly every instance." Coriat (9) explains that "the repression of painful memories (usually sexual) into the 'unconscious' is how the reactions arise"—that "the sources of these unconscious ideas are unknown to the subject," and "being usually related to 'the strongest instinct of living matter,' the unsuccessfully repressed material dominates consciousness." These "unconscious" complexes completely overpower and dominate the "conscious," showing a mechanism of unsuccessful defence, Coriat contends.

It is said that the trend of the psycho-pathology of dementia præcox seems to show that we are dealing with a dissociation of conflicts, or of emotional experiences, with conflicts of complexes, with a conflict of instincts. Bleuler (9) makes out that "under the complex conditions of modern life difficulties of adjustment arise, especially in relation to the reproductive function." I have a persistent impression that the incidence of dementia præcox falls nearer the condition of celibacy than that of the marital state, even when allowing for the fact of the natural and commendable celibacy of adolescent years. If this be so can we assume that the cerebral representative centres for the sex organs (having no annulling power over the elaboration and physio-chemical action of their respective hormones) will themselves (from the excess of the⁽²⁾ hormone "call,"

which is supposedly allayed by normal functioning) be required (in the celibate candidate for dementia præcox) to exert so great an effort of inhibition, through the medium of the vitally deficient neurones (which with difficulty can bear the weight of it), that a state of strain or tension is recorded, which, psychically interpreted, will have an "affect" of that "painful" character which leads to refuge being taken in the mechanism of "transference"—some other ideational complex, or complexes, being forced to share the burden of this "affect"? Anyhow, no matter what sort of appeal this may make to our minds, "the basic factor which causes efforts of psychic compensation around which are woven phantasies, etc.," "is the constitutional inferiority of function" (Mayer) (10). This leads, as we have seen, to a strain interpreted as a tension of affect—in surplus, a surplus that spreads itself, and holds suzerainty over other than its original ideational groups, and thereby causing introversion of "attention" and the day-dreams⁽³⁾ of strong affect we met with further back in our paper.

By the way, then, of combined biological and environmental causation, we find ourselves once more with a further excess of affective tension, which also must seek outlet subconsciously through the physiological channel of the emotions—the sympathetic nervous system. Meyer mentions "phantastic day-dreaming" as synonymous with "states of tension," and Singer (6) avers that "affective states of consciousness are inseparably related to an adjustment of the whole body—where one is present the other exists." The sympathetic system furnishes the physiological basis for the emotions, according to Ferrari (11).

One may have hastily assumed, from the descriptive phrases used concerning dementia præcox, such as apathy, emotional indifference, or vacuity, that the patient dwelt in a land of colourless ideation; but this is not so, for, says Coriat, "the data furnished by the psycho-galvanic tests, and by my demonstrations of the pulse reactions in dementia præcox, have shown that the emotional apathy . . . is merely superficial; besides, the presence of emotional complexes can also be clearly demonstrated by the association tests" (9). As Stransky (9) puts it, "the emotions are found (by analysis) not to be deteriorated at all, but active, though latent, and merely split off (dissociated) from their corresponding ideas. The

noopsyche or intellectual processes, and the thymopsyche or affective processes, which act side by side harmoniously in the healthy mind, are no longer in unison in the inco-ordination that takes place in dementia præcox." He also shows us how "the apparent dulling of the emotions is due to the dominance of the ruling complex, and the development of the 'autism,' or 'shut-in personality,' of Hoch."

This subterranean lake, then, of vagrant and vibrant emotion, gets vent for its excess by welling up on to the physical surface, through the physiological channels of the sympathetic. The stimulated sympathetic finds expression through the functioning of its peripheral end organs, and of these the chromaffin cells (which accompany the ramifications of the sympathetic, which are so strongly represented in the medulla of the super-renal capsules, and which are developmentally so closely associated in origin with the sympathetic nerve-cells themselves), are notable and important members. (We believe these chromaffin cells are first recorded as low down in the zoological scale as the amphibia.) One of their specific functions is to secrete adrenalin, which by the super-renal vein gains the inferior vena cava, and, thence, the general bloodstream. Adrenalin is in itself a stimulant of the sympathetic system (Eppinger and Hesse) (14), and as Ehramann informs us that as a result of his investigations he finds that adrenalin is continuously flowing from the adrenals, there should be a continuous tonic influence on the sympathetic.

The access of an additional and continuous psychic stream of stimulation through the sympathetic to its end organs will upset the cyclic balance, and cause excessive elaboration and secretion of adrenalin as a functional response. The affinitive derivation of these cells to the neuronics will certainly imply their almost as early susceptibility to the biological handicap as the neuronics cells themselves. We would, therefore, expect almost simultaneous evidences of disfunctioning. Their "irritability of weakness" being seen in hypersensitiveness to stimulus, as hyper-secretion at first, perhaps later on as hypo-secretion.

Swale Vincent (15) records a most interesting experiment: "Cannon and De la Pax," he says, "point out that, according to the researches of Dreyer, Asher, and Tschehoksaroff, the adrenal secretion is under the control of the thoracico-lumbar

sympathetic system. They further call attention to the fact that the phenomena of a major emotional condition, in an animal, indicate the dominance of sympathetic impulses. When, for example, a cat becomes frightened, the pupils dilate, the stomach and intestines are inhibited, the heart beats rapidly, the hair of the back and tail stand erect—all signs of nervous discharge along sympathetic paths.

“The authors put to the test the suggestion that the adrenal glands share in the widespread subjugation of the viscera by sympathetic control.

“The inhibition of contraction in strips of longitudinal intestinal muscle was used as a physiological test. Blood was obtained from a cat when quiet, and again after the animal was excited by the presence of a barking dog. After an initial shortening the strip contracted rhythmically in blood from a quiet animal. In no instance did such blood produce inhibition. On the other hand blood taken from animals after the emotional disturbance showed, more or less promptly, the typical relaxing effect. The effect was obtained in blood from the inferior vena cava near the liver. The authors believe that the effect was due to secretion on the part of the adrenal glands, and they offer a further suggestion that the persistence of the emotional state after the disturbing object has disappeared may be in part due to an autogenous continuance of adrenalin secretion” (4).

Beidl (16) records that the direct action of adrenalin on the arteries of the brain is constriction (5), and that stimulation of the thoracico-lumbar sympathetic causes constriction also of the arteries of the brain, and we cannot, remembering this, keep our eyes away from that vast network of muscle-coated arteries that permeate the pia (which closely hugs the uttermost ramifications of the cortex of the brain). What a vasoconstriction! What a “cut-off” of supply! What a limited stream only can the long, straight and fine cortical arterioles obtain—arterioles that go straight to the deeper layers of the cortex! Layers that are reported to be more deeply affected pathologically than others in dementia præcox!

“In the catatonic forms Alzheimer has recognised distinct gliosis, limited to the deeper stratum of the cerebral cortex.” This has been confirmed by Daunton (Tanzi) (17).

Tanzi thinks that the connection between the emotions, will, and conduct resides in the deeper layers of the cortex,

which anatomical researches indicate to be the most affected. The general ischæmic condition can be seen even ophthalmoscopically in the optic discs which, at times, show a general pallor (18). This ischæmic or anæmic state can be credited, for Wiggers (19), using the isolated dog's brain, and perfusion with Locke's fluid containing adrenalin, has been able to observe a diminution of the outflow of fluid, from which he concludes that the brain possesses vaso-motor nerves, and that adrenalin acts on the ends of these.

What are the clinical symptoms of chronic brain anæmia? Dr. Rae Gibson, in his paper on dementia præcox, speaks of the similarity of the changes noted in these cases to those found in the brains of animals as a result of experimental anæmia.

Osler, amongst other evidences, mentions difficulty of mental effort, slight irritation causing undue excitement, and hallucinations; and Roberts notes marked mental excitement, restlessness, even violent maniacal conditions. De Fursac says: "The mental symptoms of disease of the cortical system of cortical arteries are apt to be prominent from the beginning, hallucinations, violent excitement, agitation, confusion, and inaccessibility." Surely this would do, word for word, for an exact description of phases in hebephrenia, and catatonic excitement, in any of our standard text-books of psychiatry!

Both catatonia and hebephrenia begin with mental confusion (White). In describing the, sometimes sudden, onset of catatonia, White says that it may be from some severe emotional shock or the sudden loss of blood. The catatonic stupor is revealed by muscular tension, negativism, and stupor. The catatonic excitement by "increased psychomotor activity, reminding one very much at first of the manic stage of manic depressive psychosis. The physical symptoms in catatonia are more prominent than in any other form of dementia præcox: mydriasis, exaggerated tendon reflexes (? upper motor neuron), vaso-motor disturbances, increased sweat and saliva, and loss of weight."

Hebephrenia (according to White) is often ushered in by excitement that may lead to a diagnosis of mania.

One may say, What about the low arterial tension in dementia præcox? Dr. Rae Gibson found in his investiga-

tions that the average of sphygmomanometric readings was low, with a frequency of readings below 100 mm. (hg.). I fancy these readings were recorded after the initial acute stage of the onset of the disease, for later on a physiological exhaustion of a continuously hyper-stimulated unstriated tunica media of the arterial system, with a resulting passive dilation, would be quite expected by us. And, if this view be not acceptable, one can fall back on a second pathological effect of adrenalin—that is to say, its toxic action. When toxins affect the body it is said that the sympathetic suffers, and becomes paralysed before the autonomic, which is apparently hardier and less sensitive. (In this paper we use the appellation “autonomic” in the sense in which Langley uses it, *viz.*, as antagonistic, on the whole, to the sympathetic proper.) Again, adrenalin is stated by Elliott to “have a poisonous action on bioplasm,” and may be directly toxic to the non-striped tunica media. Some maintain that the sedentary and listless life of the patient is explanation enough of the lowered blood tension. Cazzamalli asserts a diminished energy of the cardiac muscle, and a hypertonic state of the peripheral circulation (23).

Having mentioned the toxic effect of adrenalin (which is in addition to its vaso-motor effect), let us study it a little more closely.

“Drummond reports that after the administration of adrenalin there occurs congestion of organs and histological changes, indicating that the substance acts as a protoplasmic poison. The toxic effects, like those on blood-pressure, are due to the action of adrenalin” (Swale Vincent, p. 162).

“Elliott points out that a poisonous action of adrenalin on bioplasm is suggested by its chemical composition, which displays the NH , CH_3 grouping that resists chemical alteration in the body with great stubbornness” (Swale Vincent).

Tyson and Clarke have recently declared that their investigations on the ocular changes in dementia præcox support the view that the disease is caused by auto-toxæmia, and that the poison is primarily vascular, and induces neuronic degeneration. The arteries of the fundus are generally congested, the veins dilated, and the disc conditions running from congestion to general pallor.

“The active substance of adrenalin is (according to Oliver and Schäfer) probably taken up by, and remains for a time

stored within, muscle, and that this may, in a measure, account for its disappearance from the blood. It is not excreted by the urine, nor at once re-absorbed by the capsules. Its ultimate disappearance is probably due to a process of oxidation in the tissues. Oxidation of the active principle does not occur in the blood" (Swale Vincent).

"Elliott concluded, as to the localisation of the action of adrenalin, that the excitation must be due to some substance within the muscle-fibres being affected by the drug, and suggested that this substance is present in the 'myo-neural junction,' where it is originally formed."

Sir E. Schäfer adds a further suggestion, *viz.*, "that the formation of this substance being once started, its amount is also controlled by the sympathetic, and if this control be cut off (? by its own toxic property) an inordinate quantity may accumulate, thus increasing the excitability of the isolated muscle-fibres" (Swale Vincent.)

"MacFie's observations prove that the presence of nerve fibres is essential to the appearance of such hypothetical excitable substances." "These different views show that adrenalin has functionally a very intimate relation to the sympathetic nervous system, and this is particularly interesting when we remember the accepted origin of the chromophil tissues" (Swale Vincent).

How greatly we are indebted to those lonely pathfinders—the experimental physiologists! "Toxic to bioplasm!" "Stored in the muscles!" Surely it can't be that we are on the trail of catatonia?

For Bleuler, catatonic tonus as a true motor symptom is questionable. To him it appears as a psychical phenomenon⁽⁶⁾. Evanson suggests an analogy to the rigidity seen in certain hypnotic states (9). "Psycho-analysis has not thrown much light on the genesis of catatonic symptoms" (31). But the germs of any infective fever would often appear to act with catalysing effect on catatonia, and we have surely all seen this from time to time. It may be, however, that at times together, and at other times apart, each influence, toxic, or psychical, creates a similar manifestation. I am well aware that catatonia occurs in various types of psychosis, and is often evanescent. Besides the toxic and vaso-constrictive effect of adrenalin, the sympathetic disturbance is further seen in excessive perspira-

tion and salivation, also in the frequently irregular rhythm and force of the heart-beat, not to mention the pupillary variations that are recorded.

"The hypophysis stands in correlation with other glands of internal secretion." "It acts upon involuntary muscles and dilates the pupils." "It also takes a part in regulating tissue metabolism." "It is through its posterior lobe that it influences the circulatory apparatus." "The colloid secretion of the pituitary is probably the most active secretion of the gland." "The colloid is secreted into the ventricles, and absorbed into the brain tissue—it is thought to be essential for myelination" (A. Munger).

The hypophysis being correlated with the other glands of internal secretion under control of the sympathetic, any disturbance of the sympathetic may therefore be recorded in defective myelination and neurotrophism. Dercum and Ellis (19) found an absence or diminution of colloid in the hypophysis in cases of dementia præcox that they investigated.

Professor Goldman says: "Glycogen is stored up in the choroid plexus, and from there given out into the cerebro-spinal fluid from a very early period of foetal life onwards." He also found by *post-mortem* examination that vital staining (*per venam jug.*) was limited to the choroid plexus of the lateral, third, and fourth ventricles, and did not reach the central nervous system; but that when toxic doses were injected the stain penetrated into the cerebro-spinal fluid, and so reached the central nervous system. He considered this result to be due to injury to the choroid epithelium, which was rendered inadequate as a filtering medium.

Adrenalin, itself a toxin, will have the possibility of *entrée*, therefore, to the most important and delicate recesses of the central nervous system, where it can perform its fell work on neurons already half asphyxiated by vaso-motor constriction, and impoverished, we may say, by neurotrophic loss from the diminished quantity of colloid supplied by the pituitary.

The following statements, taken together, are of interest:

Agadschanian, and others, find that intra-peritoneal injection of adrenalin in rabbits causes the glycogen to disappear from the liver and muscles, or at any rate reduces its amount (Swale Vincent).

"Mott (20) finds glucose in human cerebro-spinal fluid under

normal conditions in quantities varying from 1·2 to 2·5 in 1000, and that these amounts are diminished in certain diseases of the nervous system—for instance, dementia præcox.”

Administration of adrenalin produces a temporary glycosuria. Pilocarpin, a vagotropic substance, can arrest adrenalin glycosuria (Eppinger and Hess).

Dr. Smillie found a transient glycosuria in 20 per cent. of students at the end of a difficult three hours' examination. “These doubtless represented the sympathotonic members of the group who happened to possess a storage of available glycogen at the time of the experiment” (28).

In turning to the macroscopic pathological appearances as seen in the brain *post-mortem*, we find, in old cases mostly, a slight shrinking or general atrophic condition, particularly of the fore part of the brain; a compensatory œdematous state in the meninges, and increase of cerebro-spinal fluid; cortex and white matter glistening, pallid, and moist on section, as in anæmia.

Histo-pathology reveals, according to Singer (6) changes in the nerve-tissue proper, lipoid and protagonoid degenerations of nerve cells with overgrowth of glia cells, and certain amœboid cells which Alzheimer says are for the purpose of removing the varying lipoid products of degeneration in the nerve cells and conveying to the vessels, where they are absorbed. Similar changes, he says, are found in some of the intoxication disorders (such as tuberculosis), and might lend colour to the intoxication theory. Coriat (9) says that the histological findings in the acute uncomplicated dementia præcox cases have not furnished proof as to whether these findings cause the disease, or are merely fatigue changes due to catatonic restlessness. Meyer (21) says that similar changes are found in the heredo-degenerative condition of the brain called “Huntingdon's chorea.” An axonal type of neurotic degeneration, with a secondary glial increase, and with a slight vascular pathological response, would indicate roughly the general state of affairs.⁽⁷⁾

“Baller (22) traces the vaso-motor disturbances, cyanosis, circumscribed œdema, etc., found in dementia præcox to compression of the large veins by tension of the muscles in cataleptic condition, and describes the œdema and cyanosis as symptoms following a catalepsy of the vascular muscles. He is of the opinion that these vascular disturbances are a specific symptom

of dementia præcox, and may thus be readily employed in differential diagnosis."

"Cazzamalli (23) finds that when catatonic symptoms are present the objective examination reveals a diminished reactive and contractile capacity of the myocardium, and various alterations of the peripheral circulation, due, perhaps, to a spastic state of the vascular muscle; that the sum-total of clinical and experimental investigations, sphygmographic and sphygmomanometric, indicate, particularly in the presence of the catatonic syndrome, a diminished energy of the cardiac muscle, and a hypertonic state of the peripheral circulation, the cause of which is at present unknown." In the light of this and of our knowledge of the vaso-constrictive action of the vertebral sympathetic, and of adrenalin, which has also a toxæmic irritative quality, this hypertonicity of the arteries can be understood—granted the working presence of my hypothesis. The adrenalin also would naturally as a toxin poison the muscular energy of the myocardium. It is well known that the toxic effect of alcohol causes spasticities of the musculature more or less generally in chronic alcoholism and alcoholic excess.

Dercum and Ellis (19) examined the suprarenal medullas of eight cases of (? advanced) dementia præcox, and found an absence of chromophil tissue in them all. Unfortunately the presence of tuberculosis, as well as the long period after death before the *post-mortem*, has rendered these findings unnegotiable.

As you know, there are other theories in regard to the intoxication in dementia præcox. The main ones are:

The theory of "hyperthyroidism," the theory of "intoxication from the sexual glands," and the theory of "intoxication from without" (including the great alimentary tract).

Concerning Berkley's claim of hyperthyroidism, Coriat combats this as not very convincing to one familiar with the goitre district and large numbers of thyroid affections (9). The indifferent results of thyroidectomy in dementia præcox, he maintains, speak strongly against the disease having any connection with perversions in the secretion of the thyroid gland.

Concerning Kraepelin's hypothecation of auto-intoxication from disorder of secretion of sexual glands, Coriat asserts that it also has been demonstrated to be utterly erroneous (9).

In regard to the theory based on "intoxication acquired from

without," Dercum and Ellis assert a uniformly negative clinical history of infections and intoxications from without (19).

In respect of the hypothesis of intestinal intoxication, Coriat (9) asserts that he was able to demonstrate a few years ago that intestinal toxic products through absorption are unable to produce the disease, as hyperindicanuria so frequently found in the akinetic state of dementia præcox, was merely an index of the accompanying intestinal torpor. In fact, when by the use of intestinal antiseptics the indican diminished to normal, or almost disappeared, no parallel improvement took place in the symptoms of the disease.

(24) "The pancreas is heaviest in those psychoses in which gastro-intestinal intoxication plays an important part."

"The average weight of the pancreas in man is 70 grms."

"In dementia præcox the average weight is 69 grms.," in this thus negating the presence of the gastro-intestinal intoxication.

Freud, Bleuler, Adler, and Adolph Meyer do not lay much weight on the element of intoxication. This school of thought includes the Freudian mechanisms as you know them: dissociations of personality (Bleuler); imperfect biological reactions with consequent efforts at readjustment, substitutions and subterfuges (Adolph Meyer); wish fulfilments and shunnings (Koch); basic factors of constitutional inferiority of function with efforts of psychic compensation, seen in phantasies, etc. (Adler).

Edward Mayer, Singer, and Jung, while admitting psychological explanations, bring in the possibility of toxic factors in addition. Indeed, Edward Mayer admits (as does White) a reactive type of the psychosis where complexes "lie near the surface," and have a possibility or capability of removal, and of another type styled the "constitutional type," which have no environmental factors as a causal influence, but in whom chemical, pathological, or genetic causes are alone at play which are productive and deteriorating, and in which the therapeutic outlook is much worse. As we write we find that Edward Mayer reports (what seems in line in part with our own conception of affairs) that "Jung in his *Psychology of Dementia Præcox* attempted to bridge the gap between the two camps with his ingenious hypothesis of a toxin action resulting from the emotional undercurrent included in the suppressed complex,

and many suggestions have, since him, been advanced concerning thyrogenous and other toxins" (7).

Loewe (25) finds an increase of the colloid substances (separated by dialysation) in the urine of cases of catatonia and hebephrenia. This is most pronounced in catatonia, and there is a high content of toxicity in this colloid in catatonia.

In a tentative effort to envisage (through all the preceding statements) the operations and results of an adrenalin toxæmia in a degenerative psychosis, one is naturally inclined to "accommodate" to the view of a major output and effect in hebephrenia, and a maximal in catatonia.

I have sought by chemical test to confirm the presence of adrenalin in excess in the blood-stream of a definite case of catatonic dementia præcox.

Going upon the fact that potassium bichromate gives an elective brown coloration to chromaffin tissues, I found a similar brown coloration exhibited when it was introduced into a test-tube containing solution of adrenalin chloride.

The blood of a non-catatonic was taken as a control, and the blood of a distinctly catatonic dementia præcox patient was also taken.

The blood-serum of each was separated by coagulation, and equal quantities were drawn off into separate test-tubes. A similar number of drops of saturated potassium bichromate solution was added to each tube, with the result that a deeper coloration was induced (seen best in reflected light) in the tube containing the catatonic than in that containing the non-catatonic blood-serum.

I read this as an indication of the presence of a greater quantity of adrenalin in catatonic blood-serum than in the non-catatonic. Owing to the dearth of acute catatonic (or even of typically hebephrenic) dementia præcox patients in Hartwood I have been unable personally to extend this practical investigation. This test was "negative," as regards coloration, when applied to the cerebro-spinal fluid of this case of catatonia (somewhat disconcerting to the extension of our theory to the cerebro-spinal fluid).

The comparatively slow demential course of most of the paranoid forms suggests the absence of concurrent toxæmic conditions, and thus also of "sympathetically"-relieved affective tension. Statistics, indeed, tend to sanction the credence that

it is a heredo-degenerative psychosis, descending most frequently directly from a paranoidal constitution of mind in the parents. This constitutional paranoidal tendency saves the patient from definite hebephrenia or catatonia, because his delusional proclivity of intellection works onward in vivid evolvments, and transient pursuits of delusional conception, this of itself—representing definite mental performances or proceedings—provides an adequate working surface for the absorption of any emotional or affective excess which is not therefore permitted to accumulate, to escape subconsciously by way of the sympathetic.

Singer says that Kraepelin in his latest book “seizes with avidity Jung’s suggestion that a toxin might result from the disturbance in metabolism produced by the emotional upset, and thinks that he has refuted this altogether by asking why, if this were so, the much greater disturbances seen in manic-depressive psychosis do not call forth such an intoxication.” “The cases are not in any sense similar for the reason that the manic-depressive disturbances are reacted to in an adequate manner whereas, according to the views of Jung and Freud, in dementia præcox the reactions are subterfuges, and merely shelve the question at issue” (26).

The resistiveness and negativism of the catatonic is to me now so susceptible of explanation as the result of a toxic, therefore irritable and spastic state of muscle tissue, which immediately becomes stimulated into functional contraction on the added stimulus of mechanical stretching by an outside agent. The muscle-sense therefrom being massively and kinæsthetically painful, is resented psychically. The action of the outside agency is interpreted as causally responsible for this “pain,” and these extraneous and directive indications of muscular movement are resented and negated.

The motor apparatus being wholly in this state of extreme tonicity, you get echolalia or echopraxia following the least suggestive stimulus. The mental image of an action being to the motor apparatus like a spark to gunpowder.

Throughout I have dwelt mainly upon the chromaffin tissue as part of the “sympathetic” expression ; but the thyroid and the hypophysis, etc., cannot be altogether denied consideration, though the physiological vigour and toxic power of adrenalin seem to warrant the stress laid upon it.

The question also arises (if my theory of the patho-physiological mechanism is accepted) as to what differences might be expected clinically in the sympathotonic compared with the vagotonic (*i. e.*, of autonomic tonus) type of constitution. This line of thought might, if pursued, suggest some interesting classifications in the clinical presentations.

Questions will also occur as to whether hebephrenia is primarily an exhibition of dementia præcox in a sympathotonic type of constitution, and catatonia in that of the autonomic or vagotonic type? Then, should pilocarpin be administered as an autonomic stimulant in hebephrenia? What about the pancreatic autonomic hormone to the adrenalin system (Eppinger and Hess)? The effect of pilocarpin and the effect of arsenic upon glycosuria, etc.?

To dwell on these subjects would take my paper quite beyond the limits suggested by its title, and lead us into what is, at present, to us but the wonderland of conjecture.

For facilitating access to *matériel*, and for every encouraging interest, I am indebted to Dr. N. T. Kerr, Medical Superintendent, Hartwood.

Mr. G. Macleod Millar can verify the technique, and the result of the potassium bichromate in blood-sera test as exhibited with this paper.

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(1) A systematic observation was made of the Betz cells in a large number of cases, and it was found that in every type of insanity a varying percentage of the cells presented the features of the axonal type of degeneration, usually in an early stage. The percentage was lowest in general paralysis, *vis.*, 20 *per cent.*, and highest in epileptic imbeciles, *vis.*, 60 *per cent.* The average for the whole series was 35-40 *per cent.* (John Turner).—(2) I extend here the conception of a Hormone (the active principle of an internal secretion which “effects a correlation between the activities of the organ of origin and the organ on which they exert their specific effect” [30]) to include the brain (with its sensory, motor, reflex, automatic and psychical functionings) as an organ (in particular representative centres, and as a whole) specifically affected by the activities of the sex organs, and endeavouring to respond, as well as it may, by efforts towards harmonious correlation. Others may prefer to let their thoughts travel on the recognised double lines of afferent and efferent nerve conduction which connect the provinces of the organs with their great central exchange—the brain.—(3) During a remission period a patient required her mother to warn her brothers and sisters against day-dreaming, which she blamed for her mental breakdown. This is impressive and arresting, like “a cry out of the night.”—(4) Eppinger and Hess (14) suggest “hormone interaction of an inhibitory nature between the pancreas and the chromaffin system of the adrenals, since the chromaffin system (adrenalin) takes the upper hand in respect to the physiological balance with the autonomic on extirpation of the pancreas. They even infer the probability of the existence of an autonomic hormone.” “It is well to keep in mind what they say on the analogy of certain physiological hormones (as pituitarin) in their selective actions on certain parts of one or other vegetative nervous systems . . . that it is easy to conceive that many hormones have definite relations to a special branch of the two nervous systems.” “The study of pharmacological substances shows that vagotropic and sympathotropic activities do not always exert a universal action, but have a special predilection for one or other branch of the two systems.” Adrenalin is a general vaso-constrictor, but it does not constrict the coronary

artery.—⁽⁵⁾ Adrenalin stimulates the peripheral vaso constrictors (29).—⁽⁶⁾ One morning some years ago a severely catatonic patient, who lay tightly contracted and semi-stuporose the night before, and who was then injected with "polyvalent" serum at my "former" chief's (Dr. Lawrie, Greenock) request, was found ably playing the melodion to an enraptured ward. At the time we considered this a *propter hoc* chemico-physiological phenomenon!—⁽⁷⁾ John Turner (27) considers that axonal-like degeneration of Betz cells, and the presence of subcortical nerve cells, predominate in asylum cases. A third change ("halo-degeneration") he finds not decisive as yet in itself, but more common in cases of dementia præcox and congenital mental defect.

Some Introductory Remarks on the Organisation of Research.⁽¹⁾ By DAVID ORR, M.D., C.M.Edin., Deputy Medical Superintendent, County Asylum, Prestwich.

IN opening this subject, I wish to give first a few preliminary words of explanation. The object of this paper is to raise the points germane to the organisation of research. Organisation, to my mind, is the most important point in research, and the only foundation upon which successful investigation can rest. Anything which follows will be clearly understood to be merely an opinion expressed in order to open discussion and invite free criticism. The illustrations given of the difficulties attending investigation in our subject are nothing more than examples: they are not meant to be regarded as definite lines along which research should be conducted, but rather to be read in the sense of evidence brought forward in favour of a serious and co-ordinated effort on the part of those who would attempt to discover the pathogenesis of morbid psychology and neurology.

Research invariably widens our horizon by accumulating knowledge and broadening our point of view, and the principle underlying all research in regard to disease should be to elucidate the mechanism of normal processes, and the manner in which these become abnormal. It frequently happens that the study of morbid processes provides the investigator with definite knowledge regarding normal function. Cretinism is an example of this. It is only by studying normal and faulty mechanisms that we arrive ultimately at logical conclusions which warrant argument from a general to a particular. It is to be regretted that much time and labour is frequently expended in arguing in the reverse direction.

Research into the causation of insanity up to the present time has been either isolated, neglected, or starved, and this

for reasons too obvious to require any further discussion ; and a perusal of the literature shows that very much more could have been accomplished with the aid of encouragement and co-ordination. It is true that at one period of our knowledge isolated effort could make some headway, and early workers must be congratulated on achieving many solid and illuminating results ; but then we stood upon the threshold of discovery ; at the present day the problems are much more complex, and the co-operation of several special workers has become essential. In early days, and even up to fifteen years ago, volumes were written on the morphology and connections of the nerve cell. The work was of a comparatively simple and straightforward nature, and could be carried out with simple apparatus, hence isolation did not militate to a serious degree against research. Now, however, we have arrived at a stage when it is admitted that the teaching to be derived from altered morphology has ceased to carry us further unless supplemented by the study of the many and intricate processes which lie behind morbid anatomy.

Modern investigation demands more time and study from the worker than formerly. Research has come to mean specialisation in a branch after a thoroughly broad preliminary training. In the research which specially interests us a sound knowledge of general pathology must be brought to bear upon an organ—the brain—whose anatomy, though by no means completely known, is demonstrated to be of exceeding complexity, while its physiology is still in its infancy. The anatomy of the nervous system still provides a fund of problems : add to these the problems in physiology and pathology, and it can readily be imagined how many difficulties face the untried, and even the experienced investigator.

This Society has recently appointed a special sub-committee to consider what steps should be taken to assist investigation into the causation of insanity. Simultaneously sporadic efforts are being made towards the same end, and it seems probable that these will take the form of central laboratories to supply the needs of either one large and densely populated county, or of several smaller counties. I may say at once that my firm conviction is that no material progress can be made without a central laboratory properly constituted and equipped ; and it is this necessity for a central laboratory to which I wish to draw attention.

If we accept the thesis that a central laboratory, furnished with modern appliances and conducted on broad lines, is the ideal at which we should aim, then let us inquire into what is necessary to ensure the justification of its existence, and the carrying out of an ideal policy.

In the establishment of a laboratory there are two cardinal factors to be considered: function and equipment. These are inseparable. Function has no existence without equipment; and equipment is wasted unless skilfully directed towards a definite end. If asked to define what is meant by the function of a research laboratory, a large number of persons might answer "a building in which research is conducted"; and they would be partially right. But a most important part of the definition is not included in this. There is a great deal more comprised in it than that. One might offer a provisional definition by saying that the function of a research laboratory is to conduct research, and to educate a series of workers, so that they and those whom they in turn instruct will be fitted to carry on the work of the future by advancing upon the discoveries of the present, and thus secure a continuity of research. In saying this I am quite conscious of the fact that there are still many who disparage the patient research on which alone scientific therapy can be based, and consider that the provision of education for posterity is a subsidiary matter. A little knowledge of the elements of the problems involved might change their point of view, and thereby spare us that glib pseudo-scientific criticism which thrusts its way into argument from time to time. Research is an exceedingly slow process, and it is obvious that those who would conduct it quickly grasp neither its difficulties, its scope, nor its application. Research, coincident with investigating the causation of disease, must be utilised to teach others what is already known about it, and point out definite lines of inquiry. It is only thus that the organisation and the potentiality for research of a laboratory can be utilised to their full capacity, and contribute results which justify the legitimate expectations of the original founders.

Now let us look a little more closely at the function of a research laboratory in so far as it concerns the elucidation of problems in insanity. In no branch of medicine is the field so wide, or are the difficulties so great as here; and no other

investigation requires so much general and special knowledge. Breadth of training and faultless technique are absolutely essential, for, to the errors so prone to creep into investigation in general pathology there are added those peculiar to the nervous system itself. The scope of our speciality, and the requisite training for the investigation of its problems, are well expressed by Prof. Lugaro: "There is no doubt that all sciences have a reciprocal connection, and each advances by taking advantage of the progress made by others. In practice it is not possible to limit one's attention to a single branch of a complicated subject . . . in no science do so many sciences dove-tail into each other as in psychiatry. Therefore the alienist must—as much as the time at his disposal and his individual capacity permit—take an active part in work developing in neighbouring fields of research, cultivate other sciences and help them to progress, in order to further the progress of his own. The mere study of the psychology of diseases of the mind, to which psychiatry should be reduced according to some, is a necessary study, but by itself ineffectual and sterile. Alienists are bound to leave their own field, fashion and solve for themselves their own special problems in the other sciences. Only in this way can they contribute to the creation of a complete psychiatry." (1)

Everyone must admit that Lugaro states the case with the utmost candour. He is careful to avoid minimising the difficulties connected with the problem, and one of his remarks is worthy of special note: "in no science do so many sciences dove-tail into each other as in psychiatry."

There is a multiplicity of problems connected with insanity, which can be grouped as anatomical, physiological, psychological, pathological, bacteriological, chemical, and serological. The acquirement of the fundamentals of this array of special subjects demands time, patience, and practice. Each requires for perfection continuous and thorough investigation, and no single one can be developed without assistance from the others. Therefore anything short of a policy which aims at breadth, efficiency, and ensured continuity, is predestined to reap possibly partial success, to arrive very probably at erroneous results, and to court in the end dismal failure. This may seem too pessimistic a view perhaps; it is, however, one easily capable of illustration.

The history of scientific investigation teems with examples of the futility of attacking problems from too narrow a standpoint. Look, for example, at the subjects of aphasia and general paralysis of the insane. In the case of aphasia brilliant clinicians have in turn held the field since the days of Broca, theory has succeeded theory until scientific dogma reached the very limit with Marie's assertion of the paramount importance of the lenticular zone. And now this view, though ingenious and comprehensive, and for a time popular, has in turn collapsed before unbiassed scientific criticism, and all we know now is that our conceptions regarding aphasia have been far too narrow, and that the localisation of the centres for language, and their interrelation, can be learned only by skilled investigators who are prepared to examine the entire brain of any given case, and who are able to correlate the pathological findings with the clinical symptoms. To some this may appear to be an unusually uphill, thankless, or even unnecessary task, but we must bear in mind that anatomical and histo-pathological researches have demonstrated that, owing to the complexity of axonal and collateral connections in the cerebral cortex and other portions of the nervous system, a lesion in one single area of importance seriously disturbs the function of others with which it is in anatomical connection. Hence at least two factors enter into the argument at once—the immediate local effect of the lesion, and its more distant or remote effects.

It must be allowed that here the tyro, however enthusiastic, and however gifted with introspective reasoning, is lost. Without an intimate knowledge of the anatomy and histo-pathology of the nervous system, his efforts are preordained to failure. Dejerine, one of the first neurologists of the day, states the position clearly and concisely in the following words: "One can readily understand that in the study of the lesions in aphasia macroscopic observation is insufficient; microscopic examination in serial stained sections of the affected hemisphere, or even of both hemispheres, is indispensable. This is the only method of determining the limits of the lesion, and of resolving the questions still under debate" (2).

I have chosen aphasia as an example purposely for the reason that the causative lesion is almost invariably gross. One can readily imagine the multiplicity of pitfalls which

await the investigator who sets out to solve the pathogenesis of paranoia, epilepsy, or the so-called dementia præcox, in all of which the morphological changes in the cerebral cortex and elsewhere are ill-defined, and cannot by any stretch of imagination be termed pathognomonic.

General paralysis of the insane presents another variety of problem. It is a frequent clinical type, is widespread, and has always attracted a great deal of attention. In this disease it would appear that we have to deal with a diffuse sub-acute inflammation combined with neuronie degeneration, and from the histo-pathological appearances the majority conclude that a toxi-infection is the pathogenetic agent. The consensus of opinion regards both dementia paralytica and locomotor ataxy as late manifestations of a syphilitic infection, and we may grant that this opinion is correct. But, even possessed of this knowledge, are we much further on? Not yet, I fear; for, with the failure of those two diseases to yield to anti-syphilitic treatment, we are bound to confess our ignorance of their mechanism of production. Numerous investigators have supplied us with a complete picture of the morbid histology; the *Spirochæte pallida* has been demonstrated in a certain percentage of cases in the nervous system; while serology and cytology have opened a way to the confirmation of diagnosis by examination of the serum and cerebro-spinal fluid. But the problem remains unsolved, and shall remain so until we have filled in that hiatus which lies between tertiary syphilis and parasyphilis of the central nervous system.

The two illustrations so briefly touched upon could be multiplied *ad infinitum*. The ætiology of idiocy, and the various grades of feeble-mindedness, nerve lesions due to auto-intoxication, to disturbance of the ductless glands, and many other questions, are all complex studies.

For example, the condition known as primary degeneration of the myelin sheath is still very imperfectly understood. It occurs in the acute insanities, the infectious fevers, pellagra, alcoholism, diabetes, leukæmia, Addison's disease, metallic and bacterial or toxic poisoning, in fact, wherever there is mal-nutrition or interference with normal metabolism. The myelin sheath undergoes atrophy, leaving the axis-cylinder thinly covered or denuded; and certain portions of the central nervous system are affected in preference to others. When

the exciting cause is removed, the myelin sheath is regenerated. Now closely linked with this question of myelin degeneration and regeneration there are problems in chemistry which deal with the source of certain constituents vital to nervous tissue. Here obviously the neuropathologist and chemist must combine. Some progress certainly has been made, but there are still difficulties in the way which baffle the expert in pathological chemistry.

Again, there is the symptom called apraxia, a profoundly interesting example of disturbed cerebral function. One of its varieties, ideational apraxia, occurs in diffuse functional mental disturbance, such as mental confusion and dementia præcox ; it is also found where there are superficial destructive changes such as occur in dementia paralytica, and in arterio-sclerotic senility. The symptom consists in loss of the faculty of knowing how to execute an action. The alteration is purely psychic, and, "as the psychic functions represent the complex product of activities of perception and association disseminated throughout the entire cortex," it is evident that this faculty has no regional or lobar representation. (2) The morbid process causing this symptom may be anatomical or functional, and is as diffuse as the cortical substratum of psychic function. This field of the apraxias and the aphasias is one of the most difficult of studies, but it seems highly probable that whatever is gained here will help to explain the symptomatology of much morbid psychology.

There remains much to be worked out in connection with the acute, sub-acute, and chronic infections of the nervous system. We can now draw a broad distinction between the lymphogenous and the hæmatogenous infections from their specific histological reactions, and their different anatomical distribution. It may now be accepted that tabes dorsalis and dementia paralytica are lymphogenous toxi-infections, and that the path taken by the virus in the case of tabes is along the sheath of the peripheral nerves, and thence into the root entry zones of the posterior columns of the cord. But where is the infective focus? At what point does the virus enter the perineural lymph circulation? These two questions still remain unanswered ; it is not too much to say that their solution would open the way for successful therapy.

The explanation of the peculiar distribution of many non-

systemic pseudo-tabetic lesions amongst the fibres of the posterior columns of the cord is still pure speculation. It has been observed that these at first assume the shape of the letter V, with its apex pointing forwards to the commissure, and a limb diverging backwards on each side of the postero-median septum. The region of the cord affected extends from the lower cervical to the upper lumbar segments. The myelin sheaths in the affected area undergo atrophy, and, in addition, œdema of the cord is often observed, especially when the lesion is associated with a cancerous growth affecting one of the abdominal organs. The degeneration is not the result of nerve cell destruction. Now it is of great interest to remember that if the abdominal cavity be infected experimentally, the sympathetic nerves and ganglia participate in the resulting inflammation, and examination of the spinal cord reveals the above-mentioned V-shaped lesion in the posterior columns of the cord, sometimes accompanied by œdema. The vessels of the entire central axis are dilated, many showing hyaline thrombosis of varying degree, and Dr. Rows and I have observed more recently coagulation necrosis of the nerve cells in certain areas of the brain, and ischæmic softening with all the characteristic cell reactions. The peculiar distribution of the myelin degeneration is against accepting a general toxæmia as the sole cause of the lesion: while the dilatation of the blood-vessels, the hyaline thrombosis, and the œdema, due presumably to increased permeability of the vessel walls, suggest very strongly that an additional mechanism, namely disturbed vasomotor action, has come into play. In favour of this view we have the fact that when the suprarenal capsules have undergone degeneration, and there are symptoms of glandular insufficiency, the lesion in the spinal cord is situated precisely in the portion of the posterior columns indicated above. Obviously, therefore, the sympathetic system is a field which we cannot afford to neglect, and one whose investigation may prove as fruitful to psychiatry as to neurology. Much suggestive material on this point may be found in a paper by Dr. Turney (3), in which he draws attention to the part played by the sympathetic in certain neuroses. One example in particular which interests us as alienists is the occurrence of a "dream-state," with rapid recovery of orientation, followed by considerable œdema of the conjunctiva. Here we have one definite physical concomitant of a transient mental

state. I mention this case specially on account of the œdema, because, as we have already seen, œdema of the central nervous system is very common when the sympathetic ganglia and nerves are involved in morbid processes. We must, therefore, include this part of the nervous system in our investigations, especially when we propose to study those neuroses called for the time being functional.

The few examples which have been lightly touched upon are sufficient, I think, to draw attention to the variety and complexity of the problems in our speciality. It is this complexity which calls for a wide outlook; therefore we must make liberal provision for this in a centre designed to afford material aid to the investigator. And this brings us to the practical part of laboratory organisation.

In the first place there must be a complete reciprocity between the laboratory and the asylum, for clinical work can never be divorced, if accuracy is to be assured, from the guiding influence of pathological observation and research. The function of the laboratory, therefore, is to provide the medical staff of the asylums with a broad and practical grasp of what has already been done in the field of research; it must also give advice on special points to those who have profited by this training and have commenced independent investigation. Sound preliminary training must be the motto, and a periodic return to the laboratory an essential of any system which aspires to a continuous acquirement of definite knowledge.

The allusion to sound preliminary training raises the question of the equipment of a central laboratory. Equipment includes the teaching staff, the subjects to be taught, mechanical appliances, and other furnishing. The two last may be left out of the discussion, as the furnishing of a laboratory is never neglected by any chance. It is the appointment of some competent person to make use of the laboratory which is so often overlooked, and one could point to many instances of this waste of opportunity.

The scope of equipment, or in other words the amount of aid to be given to research, is of primary importance, and forms the whole basis of modern scientific investigation. A central laboratory, to be effective in the field of modern psychiatric investigation, must make provision for studies in the anatomy and physiology of the central nervous system, in psychology,

neuropathology, and in bacteriology and serology. Anyone who intends to investigate the causation of nervous disease must have a grasp of the essentials of those subjects. And here I would insist specially upon a sound knowledge of neuropathology. This is the basis of all work in neurology, that is, a neurology which embraces the whole nervous system, and does not recognise that boundary line between brain and cord pathology which is an artificial product of consulting medicine, but in research has no existence. Neuropathology also possesses this special advantage in a teaching scheme, that its study not only provides instruction in the nature of morbid processes, but teaches anatomy and physiology as well. For example, if the student proposes to investigate one case of transverse myelitis, and takes a section from each segment of the cord and medulla suitably stained for demonstration, he sees for himself the ascending and descending degenerations, subsequent to destruction at a certain level; that is, he sees much of the anatomy of the central nervous system, and so learns to think of disturbed function in association with definite paths of conduction. I feel sure that a sound knowledge of neuropathology and anatomy is the best corrective to the tendency to advance premature hypotheses, and to haphazard introspective reasoning. Every day brings forth more evidence of the value of neuropathology in elucidating the normal and morbid function of the various parts of the nervous system, and in establishing correct criteria as to the mechanisms concerned in the causation of nervous disease.

No training can be complete, however, without adequate clinical instruction, as all pathological investigation is not only directed towards the elucidation of morbid processes, but also towards a scientific explanation of symptomatology. The two go hand in hand to found the treatment of disease upon a scientific basis. I am not of opinion that the county asylum is the best place in which to learn clinical psychiatry, that is to say, a clinical psychiatry which postulates a study of the genesis and early symptomatology of mental disease. Our county asylums rarely receive a patient in the early phase of the disease. The malady has almost invariably passed through the stage of development before an authority sanctions or recommends alienation, hence the asylum medical staff misses the most instructive phase, and loses the opportunity of acquir-

ing practice in early diagnosis and treatment. A reception house, clinic, or out-patient department—call it what you will—while of undeniable benefit to the patient, especially if untrammelled by legal formalities, would functionate as a teaching school in a similar fashion to any general hospital, and thus be of great assistance to the student of mental disease. The maximum of benefit would undoubtedly be derived by placing the clinic side by side with the research laboratory, thus assuring the continuous co-operation between clinical and pathological work, which is the sure foundation of scientific investigation.

We were provided with an excellent illustration of the value of correlating symptoms with morbid anatomy at the last quarterly meeting of this Association, when Dr. Stewart read a paper on "Meningo-vascular Syphilis associated with a Retro-olivary Syndrome." Amongst others there was a destructive lesion in the medulla situated behind the inferior olive, and involving the fibres of sensation in the formatio reticularis and the descending root of the fifth cranial nerve on the same side. The symptoms were crossed anæsthesia of the syringomyelic type affecting the limbs of the trunk, accompanied by anæsthesia on the same side of the face. We were shown a large number of lantern slides before the limitations of this particular lesion were defined, and the demonstration emphasised the great importance of locating the exact anatomical site subserving the disturbed function. Many points in the case were omitted owing to lack of time, but what we saw enabled us to appreciate the great value of supplementing symptomatology with trained pathological investigation.

So far we have glanced only at the scientific equipment required by the investigator ; we have now to consider how best to provide the *personnel* of a laboratory instituted to impart the knowledge necessary for research ; and although the subjects mentioned may seem a formidable curriculum the difficulties attending the provision of teachers are much more apparent than real.

A central laboratory must have a director at its head, and the amount of skilled assistance afforded him will vary as a result of several factors, but it may be taken for granted that the permanent staff will never be sufficiently strong to teach all the special subjects in the curriculum. To subsidise a

group of permanent experts would be ideal, but very expensive, so we must adopt another and more economical plan which, however, would prove no less efficient, and requires only one proviso for its success, namely, that the central laboratory shall be attached to, or in the immediate vicinity of, a medical school, whose professors and lecturers can be utilised for teaching purposes and expert advice. This would necessitate co-operation between the administration and governing bodies of the central laboratory and the medical school, a matter which should not present any material difficulty, and an arrangement beneficial to both parties. For example, the professor of anatomy could give special lectures on the cerebral cortex, or other part of the nervous system upon which he specialised; the services of the professors of physiology and pathology could afford invaluable assistance in the application of those subjects to the nervous system. Those working in the central laboratory would derive a constant stimulus from association with the broad work of the university staff, would always be within easy reach of help on special points, would suffer less from that tendency to narrowness so easy to acquire, and so fatal in specialism, and would automatically assimilate the spirit of reciprocity so essential to success.

Nevertheless, it must not be supposed that, with a central laboratory established on lines somewhat like those indicated above, the work is finished. To assume so would be to deny to the asylum itself a most important and necessary rôle. Each asylum must have its own pathological laboratory in which those who have been trained to understand the broad neurology shall work out problems for themselves, and, by turning when in difficulty to the central institution for advice and criticism, they shall be enabled to rest satisfied that hasty conclusion is reduced to the minimum, and that they have aimed at the "verification of even those deductions which seem founded on the widest and safest inductions." (4)

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The "Amnestic" or "Korsakow's" Syndrome, with Alcoholic Ætiology: An Analysis of Thirty Cases ('). By J. M. MOLL, M.D. Utrecht, L.M.S.S.A. Lond., M.P.C., Assistant Physician, West Koppies Mental Hospital, Pretoria.

CHARCOT was the first to notice the occurrence of amnesia in some of his patients suffering from alcohol-neuritis. Korsakow studied this peculiar kind of amnesia more elaborately. He regarded this condition as a disease *sui generis*, which could arise also from other causes besides abuse of alcohol, and used the name "polyneuritic psychosis." It was later recognised that the same mental picture could exist without accompanying neuritis. Jolly proposed the name "amnestic" or "Korsakow's" syndrome, regarding it as a modus of reaction of the nervous system to various harmful agents, *viz.*, head-trauma, senium, infections, poisons—alcohol being the most frequent cause of this reaction. Most later writers agree with this view. I shall deal in this paper with the cases of thirty patients, who, at some time during their illness, presented this syndrome; I have not included any cases in which alcohol could not be regarded as the principal factor.

Like delirium tremens and hallucinosis, this psychosis only breaks out in people who have been imbibing to excess for several years.

It has been established that the direct toxic effect of the alcohol is not the cause; one theory speaks of "met-alcoholic" psychoses caused by the toxic effects of antibodies, which have been formed against the alcohol; others hold that the alcohol sets up metabolical disturbances, and that in this manner poisons are formed and not sufficiently excreted (Kraepelin, Heilig); others, again, amongst whom is Hare, have put forth the hypothesis that an increased tolerance has been established, and that a sudden fall of the amount of alcohol brought into the circulation daily causes the psychosis. I do not agree with this last view, and am of opinion that, as a rule, various factors are at work. But to dilate on this important question would lie beyond the scope of this paper.

The average age of onset lies a little higher than that of delirium tremens—between 40 and 50 years (Krukenberg,

Doellken, Bonhoeffer). The average age of my patients is 44.6 years, the youngest being 29, the oldest 67.

Chotzen and Bonhoeffer tell us that the number of "Korsakow's" (2) is 3-5 *per cent.* of that of deliria for males, up to 50 *per cent.* for females.

I find the following figures amongst the admissions to this Hospital since May, 1905 :

	Males.	Females.	Total.
Admissions . . .	1275	593	1868
Delirium tremens . .	43	2	45
Hallucinoses . . .	54	5	59
Mixed forms . . .	10	0	10
Korsakow . . .	25	5	30

If we take the relation to pure delirium, we get the following percentages: Males, 37 *per cent.*; females, 71 *per cent.*; but even if we take delirium, hallucinoses, and the mixed forms together, we come to 19 *per cent.* for males, 41 *per cent.* for females.

I am fully aware that my numbers are too small to allow of any definite conclusion; but at any rate they point to a remarkable preponderance of the psychosis in this country, specially among males.

The prodromi are usually the same as those of delirium. Most cases have an acute beginning, generally a delirious stage. I shall say more about this after having dealt with the second, or amnesic stage. In this we observe a syndrome constituted by the following symptoms:

- (1) Impairment of impressionability.
- (2) Disorientation, specially for time and place.
- (3) Amnesia, antero-grade and retro-grade.
- (4) Fabrications.

This mental picture may present itself in a pure form; it may also be complicated by other symptoms, *e.g.*, emotional disturbances, hallucinations, delusions.

Soukhanow does not make the diagnosis "Korsakow" if hallucinations are present, but most authors do not agree with him. Neuritic symptoms belong to the typical picture, but their presence is not a *sine qua non*.

About the relative value of the four cardinal symptoms the opinions are somewhat divided. Soukhanow and Clarke attach the most importance to the amnesia, while Jelgersma

and Kauffmann regard the impairment of impressionability as being of primary order. I agree with the latter view and hold that the impairment of impressionability is responsible for the greater part of the other symptoms. At times this symptom is so striking as to be noticeable at once. The moment we come into contact with such a patient it is evident that he is unable to remember things that happen to him or in his immediate surroundings for a few minutes, even for a few seconds. It is a curious thing, which has been emphasised by most authors, that this fact is not due to lack of attention, as with so many demented. One addresses the patient and he shows a keen, benevolent interest, answers questions as best he can; he also takes a kindly interest in his fellow patients, and in what is going on around him. He shows euphoria, and seems anxious to make himself agreeable. He looks at the pictures shown him with attention; even makes comments with some wit. After a few minutes, however, he is not only unable to recall the conversation or the pictures shown, but will swear with great conviction that no pictures have been shown to him at all. In the same way he will assure you that he has not yet had his dinner, while the empty plate may still be standing by his side; or he will maintain that his friends never come to see him before his last visitor has been gone ten minutes. In other cases this symptom is not so marked, and has to be looked for by questions and special tests. These patients often show great cunning in avoiding a direct answer, and in giving some plausible excuse—that they were just thinking of something else; that the pictures shown were badly printed, etc. Another remarkable point is that they seem to have no appreciation of this defect themselves, and that it does not preclude a really astonishing amount of self-assurance. If you ask "How is your memory?" they will invariably answer "Pretty good." This defect is not only displayed in connection with events that happen once or twice, but also in connection with things that recur day after day—they cannot find their way back to bed after they have left it, or remember a name which they hear daily. P. K— asks me for a match every time he sees me, although I always tell him I never have matches on me. Indeed some patients with polyneuritis have no appreciation of that either. A. S—, A. H—, W. R—, and L. P—, while paralysed, would repeatedly say that they could walk quite

well; that they had just returned from a swim or a run in the grounds. When their attention is especially drawn to their legs, they will acknowledge that there seems to be something wrong with them, but a few minutes later they will again make statements like the above.

(2) The disorientation for place and time is a direct sequel of our first symptom, which prevents the patients realising and co-ordinating their surroundings. In their self-assurance they appear to be quite at ease, greet the persons around them as old friends, but when tested it is found that they do not know a single name, and have hardly an idea where they are. This impaired orientation is often fleeting—one minute they may think they are in a bar, the next in a stable. It is equally obvious that they must fail to locate themselves in time; they even make gross mistakes in the hour of the day. The passage of time specially makes hardly an impression on them at all. They err invariably on the short side, say they have arrived two days ago, whereas it is really a few months.

P. K—, who has been an inmate since 1905, believes that he has been here nine or ten months at the outside.

P. v. d. B— has gradually exercised his memory, is able to retain several names and facts, has his own idea about the war and rebellion, can generally tell the day, date, and year after he has read the paper, which he would not care to miss. But when he is asked how long he has been here, he always answers "five months, or perhaps seven," whereas he was admitted in 1910.

A normal person not only recollects events that have happened, but also has generally a distinct idea of when they took place. This faculty is specially impaired in certain Korsakow's. True recollections may be present in great numbers, but deprived of this chronological factor, and are reproduced at random.

The so-called antero-grade amnesia, or loss of memory for the period of sickness, is evidently the direct result again of our first symptom. The retrograde amnesia, however, comprises a period prior to the disease, and can, therefore, not be explained by the loss of impressionability.

The amnesic period varies in length, often covering several years. Some patients lose, temporarily or for good, their whole store of memories, except those of early life, which are

only rarely affected. In some cases the limit is sharp, for instance, Liepmann's oft-cited case, whose memories ceased at the war of 1870, in which he had fought. He had lost all recollection of subsequent events, and imagined that he was still a student, and that his parents, who had died years ago, were still alive.

Heilbronner has pointed out that patients who have lost the remembrance of whole decennia still betray the influence of the experiences of the vanished period in their personality and general conceptions.

In recovering patients it is usual to find that the amnesic period shrinks more and more until it disappears altogether, or dwindles to a few weeks or months prior to the attack. A patient will often regain recollections of facts which happened during the attack, but which he was quite unable to retain at the time.

(4) Fabrications or fictions are a very striking part of the syndrome. These are false statements, inventions made by a patient, who is convinced at the time of their truth. They have been called hallucinations of memory; they occur in various psychoses, generally in combination with defects of memory, *e. g.*, general paralysis, paranoid conditions, hysteria, delirium tremens, presbyophrenia.

There are different sorts of fabrications:

(1) Random fabrications. The patients try to fill out the amnesic gaps by an invention concocted *ad hoc*.

(2) Distorted recollections of real facts, pseudo reminiscences.

(3) True recollections of real facts, but wrongly oriented in place and time; this is specially seen in those cases where the chronological faculty referred to above has suffered. P. S— has adapted himself fairly well to his present surroundings, but the little there is left of his mind and memory lives mainly in the past; he is very helpless on his feet, and of late has even been unable to undress himself. But all the time he will tell you with the greatest conviction of the fine walk he had yesterday in Loghi, his birth-place, of the pals he met, the drinks they had, what an awful job they had to get old S— out of the water, who nearly drowned. At times he gets very cross at night, will not go to bed, as the boys are waiting outside for another spree.

(4) Fabrications based on hallucinations. These we find mostly in the acute stage. L. P— wept bitterly because her father had been brought home dead, her daughter taken by the police, and her son shot. Her husband had told her this, and she had heard the shots. Not one of these statements contained a grain of truth, and she ridiculed them herself in a lucid moment a few days later.

(5) Remnants of dreams not recognised as such by the patient occasionally play a *rôle*.

Fabrications are most prolific in the beginning of the disease. The patients delight in starting long tales, and spinning them out indefinitely. They forget at once what they have been talking about and repeat themselves, intermingling an astonishing mass of irrelevant detail. Gross and absurd contradictions are not noticed. The patients are very suggestible, and are easily induced to dilate in any direction by leading questions. It is noteworthy that a patient will sometimes retain a fabrication much better than any real fact. Such inventions are generally connected with some strong emotional complex.

In the further course of the disease this symptom of fabrication loses its spontaneousness. Frequently it disappears altogether. In some chronic cases it is to be elicited by special questions, but there is a distinct tendency to monotony. I have observed two patients who had not been fabricating for some time start to do so again spontaneously, and with great vividness, during a short febrile illness. One of these has shown erratic periods of hallucinations and fiction ever since.

The contents of these false statements are usually within the bounds of the conceivable; the influence of former habits and of emotional complexes is evident. Hotels and bars are common scenes of their activities, so are the army, the navy, the war, for those who have served. Frequently, there is a distinct local colouring in this country, *e.g.*, the veld, kaffirs, farms, ostriches. In the acute stage, specially when there are many hallucinations, the tales assume a more phantastic character: P. S— spoke about aeroplanes getting up in his room, loaded with old friends. L. P— stated that the body of her poor dead father was in her bed, and told me to hurry up, as otherwise I would be late for the funeral.

In order to diagnose the syndrome, we must be able to

demonstrate the four component parts. After the initial stage has passed off, twenty of my cases showed the syndrome pure, or very nearly so, the other mental peculiarities being directly dependent on it. The whole condition is inevitably one of confusion. The behaviour may be in accordance, but is often remarkably quiet and collected. The usual emotional tone is contented, euphoric, often in striking contrast with the pitiful condition of physical weakness. Many patients only remain in this frame of mind as long as they are engaged in a conversation; as soon as they are left to themselves they relapse into inertia and apathy. Some show marked emotional instability, are easily moved to laughter and to tears.

We may find complicating symptoms, of which I will mention :

(1) Manic-depressive. Monkemøller has described three cases in which maniacal and depressive phases alternated. I have not observed the former, but three of my cases showed marked depression, one with suicidal tendencies.

(2) Hallucinations are not uncommon. The majority of cases have an initial delirium stage, but also later some show delirious intervals; others have hallucinatory propensities throughout. The hallucinations of sight have the familiar characteristics of those in delirium tremens and need not be described here. Illusions of feeling occur in patients with grave neuritis, the actual paræsthesia being interpreted in an illusional way. L. P— gave striking examples of this: she complained that mice were biting, cats scratching her, that hot irons were inserted into her vagina, that she had just borne a baby, that somebody had put sticky gloves on her hands, and was winding sharp threads around her fingers.

Hallucinations of hearing were noticed in ten of my cases; they are generally of an unpleasant, aggravating, persecutory character.

(3) Delusions. Pseudo-experiences of the delirious periods may become fixed, and are repeated for some time afterwards. Or, patients who have a confused appreciation of their helpless physical condition explain this in a delusional way: that they have been drugged, that poison has been sprinkled into their whisky. C. H— at times believes that the King and Queen of Denmark visited him, promised him beautiful presents; he hears their voices moaning, and concludes that they have been shut up in a cellar by bad people who grudge him these atten-

tions. We also meet with morbid ideas of jealousy, a common occurrence in alcoholics. Lastly, absurd and disconnected delusions of grandeur occur, freely expanded on leading questions. One patient said he was Paul Kruger, the King, and Governor-General, promised millions to the staff, as he possessed numerous gold mines. Cases like this have a bad prognosis; in many respects they resemble general paralysis, and have also been called alcoholic pseudo-paralysis.

I have now to deal with the physical symptoms.

As has been pointed out already, polyneuritis is usually, but not necessarily, present. In four cases (all males) neuritic symptoms were entirely absent. Six males and one female had only slight neuritis; two males and two females grave. In accordance with most authors, I found the nerves of the arms involved less frequently and less severely, slightly in three males, marked in two females. The various familiar symptoms of neuritis were found, paresis and absence or weakness of the tendo-reflexes being the most frequent. Of the different disturbances of sensibility I will only mention the tenderness of the long nerves on deep pressure and the impairment of the so-called deep sensibility (the perception of vibrations of a tuning-fork placed on the bones). This last symptom is sometimes present before the others can be elicited, it is also often the last to disappear. In ten cases it remained present. It sometimes happens that there are lesions of the spinal cord as well, but it is difficult to prove this without necropsy, and most of the milder cases do not come to this. Heilbronner and others have shown systematic and focal affections of the cord. Wherever we find contractures, impairment of the sphincters, or grave trophic disturbances like decubitus, wasting, reaction of degeneration, there is probably a more central affection alongside the neuritis; if this is so, it need not be of an irreparable nature; four out of the five times I observed these changes the function was afterwards well restored.

The more serious cases often show involvement of the cranial nerves; impairment of swallowing, and of the tongue and eye movements, vagus symptoms, pupillary changes. Partly these are of a peripheral nature, partly they seem to have a central cause, specially the eye symptoms. I shall discuss these facts in connection with the differential diagnosis.

A few words may be said here about the pathology.

It is, of course, only by accident that histological examinations of a mild case can be made; if, from analogy with the grave cases, we are to surmise similar degenerative changes in the nerve cells, etc., we must also assume that many of these changes are reparable, otherwise it would be impossible to understand the instances of late improvement, even recovery. Findings in fatal cases are: Degeneration, vacuolisation, chromatolysis of nerve cells, and dendritis of the central, frontal, occipital gyri, anterior horns of cord, spinal ganglia; infiltration of the vessel walls, increase of glia cells; loss of fibres in various localisation of the brain and cord, hæmorrhages in the basal ganglia (Heilbronner, Thoma, Wernicke, Jelliffe, and others). I have not made a histological examination myself.

The course of the disease varies considerably.

Only a few cases were observed from the beginning of the psychosis. In eight instances it was impossible to get information about the happenings previous to admission. Two of the remainder have shown a stupor in the beginning, twelve an initial delirium, three of which had had former deliria. During the first few days after the outbreak of any delirium tremens it is impossible to say definitely whether it will end as a "Korsakow" or not. We only know that, when the delirium is atypical, not very active, and when cerebral symptoms are present, there is a bigger chance for the development of a "Korsakow." Also females run a greater risk. The figures already given teach us, for this country at least, not to be too optimistic in the prognosis of a male delirium either. After a few days we get more certainty, as a typical delirium tremens then clears up after a critical sleep. If the symptoms do not disappear in this way, there is still a possibility that the psychosis will subside gradually in two to three weeks. Between a "protracted delirium" like this and a "Korsakow" transitions exist. Bonhoeffer has pointed out that in nearly every delirium tremens indications of the amnesic syndrome can be found, but that they are overshadowed by the more stormy ones, restlessness, hallucinations. In the cases that blend into a "Korsakow" we see a subsiding of the latter symptoms, whereas the former become more pronounced.

Less frequently the initial stage is one of stupor; this occurred twice amongst my cases. These are supposed to have a rather worse prognosis. F. Y—, who had a history of trauma

and enteric, besides alcohol, recovered in two months with a slight defect. P. S— is still an inmate, deteriorating gradually⁽³⁾.

Three of my people had been laid up with neuritis for several weeks before the mental symptoms appeared. From their history it would seem that the mental picture developed in a gradual manner, without acute initial stage. The same occurred in two other cases. But all these came under observation later, so that the story of the onset is only hearsay. All the same, stupor or delirium is not likely to be overlooked by the patient's relations. I therefore agree with Kraepelin and Kauffmann that a gradual development of symptoms occurs—a view that is not shared by Heilbronner, Soukhanow, Bonhoeffer. It is conceivable that the kind of alcohol taken is of importance.

The duration of these initial stages varies considerably, from a few days to a couple of weeks. During that time the neuritic symptoms are generally present, or, as we have seen, may even precede it. If they are still absent when the second stage has been reached, it is unlikely that they will develop at all.

The majority soon reach the second or amnesic stage proper. The further course of this shows many varieties. The duration may vary from a few days to chronicity, ending in death from some intercurrent cause, or from old age. It is not often that the line of this course progresses steadily to end in deep dementia; this I observed in two patients. As a rule, when a certain level of mental enfeeblement has been reached, the condition remains stationary, or even shows a tendency towards improvement. The first three cardinal symptoms remain prominent, the active fabrications disappear into the background. In some instances the course is disturbed at irregular intervals by acute, even delirious, periods.

Many cases, however, have a much more favourable termination. It is true that perfect recoveries are the exception. But we must not forget that practically everyone who gets this psychosis has already deteriorated through chronic abuse of alcohol. Therefore, if the patient is restored to his *status quo ante*, we should be entitled to speak of recovery. But even with this restriction most recoveries are with defect, *i.e.*, after their psychosis, the patients have to come down to a lower mental level. Many, however, get well enough to live outside institutions, although some supervision remains advisable.

As a rule the neuritic symptoms are the first to clear up. It is rare that grave neuritis persists. Legs that have been paralysed generally become perfectly useful again. In sixteen cases I could find, long after the neuritis had apparently disappeared, some slight remnants, such as impairment of deep sensibility, slight stiffness, loss, or inequality of the reflexes.

Of the mental symptoms the complicating ones, if they have been present, usually disappear first. Then the fabrications begin to fade, become less varied, and lose their tone of conviction. When the patients are told emphatically that a statement cannot be true they will admit that they may have been mistaken, or that they have dreamt it. Gradually they cease fabricating altogether, perhaps with an occasional relapse. It may now begin to dawn upon them that something has been the matter, that their memory is poor and must have been worse. It is very interesting to watch their efforts to improve it, and their childish pride when they have at last managed to retain a certain name or date. As time goes on they learn to locate themselves better in places and time, and the rebuilding of their memory progresses over the whole front. The quickness of this process varies greatly. I have observed two remarkable cases where the impressionability and memory had remained grossly impaired for six and seven years respectively, and who now show a moderate defect only. A. M— was discharged the other day, R. M— may go soon(*). Cases like these warn us not to be too pessimistic in our prognosis of chronics.

In seven of my cases the psychotic symptoms disappeared altogether. Their whole physical and mental condition, impressionability, memory, interests, initiative, capacity for work, was considered by themselves and their relatives to be quite as good as it had been before their illness. Six of these, however, have been mild cases throughout, the four cardinal symptoms had been marked, but only for a short time—five to fourteen days; neuritis had been mild in four cases, absent in one. In the seventh case (L. P—), both mental and physical symptoms had been severe; the latter cleared up after two months, the neuritis had then improved considerably, but had not quite disappeared on her discharge after six months.

Of the others I have called the mental defect only slight in three cases; they were discharged one, three and a half, and

twelve months after admission. It is evident that the difference between slight and moderate defect is more or less arbitrary.

Regarding the prognosis, I come to the conclusion that it is relatively good if the symptoms are not severe, and do not last long; that if the psychosis lasts longer than a few months the prognosis is, at its best, doubtful; further, that females stand a relatively better chance than males.⁽⁵⁾

A bad prognosis must not be made in cases with polio-encephalitis (v.i.), and in most cases with a stuporose onset, or with absurd grandiose delusions.

Bonhoeffer, Kraepelin, Stanley, regard the prognosis as unfavourable, have not observed recoveries without defect. Korsakow and Wernicke speak of a relatively good prognosis. Brissot mentions the case of a woman, who, after the psychosis had lasted for two years, recovered with only a slight impairment of impressionability. Kauffmann, who gives a statistic of sixty-three Korsakow cases of the Munich clinic, saw recoveries only in five abortive cases, the others all show a more or less marked defect.

14.4 *per cent.* of his cases died in the institution.

I have to record three deaths, which amounts to 10 *per cent.*⁽⁶⁾

	<i>Status quo ante.</i>	<i>Slight defect.</i>	<i>Moderate defect.</i>	<i>Grave defect.</i>	<i>Died.</i>	<i>Actually discharged.</i>
Males, 25 .	4 .	3 .	7 .	9 .	2 .	13
Females, 5 .	3 .	0 .	1 .	0 .	1 .	3

Differential Diagnosis.

(1) Delirium. During the first few days after the outbreak it is generally impossible to say whether or not, it is going to blend into a Korsakow. This question has been discussed already. When the amnesic syndrome has fully established itself the diagnosis is by no means made, as its symptoms in drunkards have nothing special in themselves to distinguish them from those which occur under other circumstances. We must then look to the history, the accompanying symptoms, and the course.

(2) After trauma capitis come strangulation, suffocation. A reliable history is of great importance. The condition develops slowly from the coma, following the injury, and, unless this has been very severe, generally clears up more quickly and fully than in an alcoholic case. Difficulties may arise when two

causes are combined, *e.g.*, when a person sustains a head injury while in a delirium tremens.

(3) During an infectious or toxic affection, such as malaria, enteric, carbonic oxide, arsenic, the syndrome may develop. Diagnosis and prognosis depend on the primary condition.

(4) In the physiological senium we sometimes find traces of our four cardinal symptoms. Where they are so marked as to become psychotic we speak of presbyophrenia (Wernicke). Often a delirious period precedes, but neuritic symptoms are generally absent. According to Kraepelin most presbyophrenics are vivid, loquacious, childishly cheery, fond of being busy with trifles, of hoarding rubbish, whereas most "amnestics," when left to themselves, soon become dull, indifferent, inert, except in delirious phases. However, transitions exist. With few exceptions presbyophrenia is steadily progressive, which is not the rule in alcoholic "Korsakows," as we have seen. Arteriosclerosis, if present, will often cause focal brain-lesions, with corresponding symptoms.

(5) Pfeiffer has described cases of cerebral tumour that showed the amnesic syndrome.

(6) Finally, that proteus-like disease, general paresis, may look very much like "Korsakow," and *vice versa*. Delirious phases are not unusual, neither are conditions of stupor or confusion, and, as we know, a "Korsakow" has generally various organic nervous lesions.

The two affections have so many points of resemblance that it is sometimes impossible to come to a conclusion at the first examination. The following points may assist in forming a diagnosis: Neuritic symptoms (inequality, loss of tendon reflexes, impairment of sensibility, etc.) without tenderness on pressure of the long nerves are rare in "amnestics," and if combined with spastic symptoms and Babinsky's reflex, are strongly in favour of general paresis.

In some cases of "Korsakow" the speech is impaired, thick, ataxic, poorly articulated, but the monotonous lalling speech with hesitation, stumbling, reduplication of syllables, especially if combined with fibrillations, quiverings of lips and tongue, remain typical for general paresis.

"Amnestics" may show pupillary anomalies, irregularity, inequality, sluggishness, or absence of all reactions; the reaction to light may also be worse than that to accommoda-

tion; true Argyll-Robertson pupil(s) have been observed temporarily (Nonne, Monkmøller), but according to an exhaustive statistical research of Bumke it has not been proved conclusively that permanent Argyll-Robertson pupils occur with alcohol as sole ætiological factor.

Schroeder has observed a few cases of "Korsakow" with permanent pupillary changes, but all of these had a history of syphilis. It is, therefore, a safe rule that Argyll-Robertson pupils are incompatible with true "Korsakow." I must add that the examination of the pupils is of no value unless done frequently, and with all precautions; a pupil which does not react to diffuse daylight may do so quite well to concentrated light in a dark room. Care must also be taken that the patient does not accommodate at the moment the light is thrown on the iris. In four cases I found the following deceptive phenomenon: The pupils reacted hardly or not at all to the first two exposures, but much better after these trials; they reacted well to accommodation. On superficial examination, one might have been satisfied to call these Argyll-Robertson.

A fit may occur in the beginning of an attack, the same as in delirium. Three of my cases had a fit previous to or after admission. These fits are of an alcohol-epileptic character. It is exceedingly rare for them to recur if the patient is under proper care and if all alcohol is withheld. Repeated fits or seizures therefore point towards general paresis unless there is a grave complication, arteriosclerosis, or pachymeningitis hæmorrhagica interna.

All paretics, except the few who have a so-called remission, run a truly progressive course, the physical symptoms and the dementia becoming more pronounced; whereas we have seen that most "Korsakows" have a tendency to come to a standstill, even to improve.

More direct and positive indications than any of the above are yielded, however, by the examination of the cerebro-spinal fluid. The following tests should therefore never be omitted in a doubtful case: Wassermann; cell-count; estimation of excess of albumen and presence of globulin. If these tests are all positive we can be certain that the complaint is syphilitic (general paresis, brain syphilis, or tabes).

In this connection I must mention shortly two rare conditions which are regarded as varieties of "Korsakow's" psychosis:

(A) The one already referred to has been described by Wernicke under the name of polioencephalitis hæmorrhagica superior. It develops on the basis of a grave delirium tremens, which becomes protracted; associated ocular palsies occur; also marked and generalised neuritic symptoms, causing grave ataxia. The cases hitherto published all ended fatally; hæmorrhages were found in various parts of the brain, specially in the sub-thalamic regions and the nuclei of the ocular muscles (Wernicke, Jelgersma).

(B) Alcoholic pseudo-paresis: One case was observed here. History of chronic rheumatism, and long-standing alcohol abuse; several deliria, besides the neuritic and amnesic symptoms, were found; great emotional instability, hallucinations of vision and hearing; rapidly changing grandiose delusions of an absurd and weak-minded type: he is the King, President Kruger, can talk to God and with Goethe, owns all the mines, offers assistant physician a million. The pupils reacted normally; no typical speech defect. His symptoms slowly grew more intense; he became quite paralysed. Within six months he died after diarrhœa and pneumonia had set in. At the *post mortem* none of the usual general paresis findings were present.

Treatment.

It will be evident that in most instances admission to a mental hospital is advisable. Except in rare cases with threatening heart failure, alcohol should be withheld at once. It is generally advisable to clean out the bowels thoroughly with calomel and mag. sulph. If the excitement is great it has to be treated by the usual measures, quiet surroundings, prolonged warm baths, wet packs. Veronal and paraldehyde are safe hypnotics. In some cases we cannot do without scopolamine, from which I have never seen any untoward result. As the patients are not only excited, but also ataxic and clumsy in their movements, great care should be taken to prevent injuries. As there is often profuse sweating, the catching of colds must be guarded against. When there is the least doubt about the heart, cardiotonica should be given at once. I generally give tinct. digitalis, strophanthi and nucis vomicæ, 5 minims of each, several times a day. In doing so one can

nearly always avoid giving alcohol at all. When contractures are present they should be treated straight away; but as a rule it is of little use trying to treat the neuritis before the second stage of the psychosis is safely reached. Local heat, hot sand or water-bags, prolonged baths, anti-neuralgics are indicated at first. I do not start with any more active treatment, but very gentle effleurage under water, before the tenderness of the nerves on deep pressure has subsided altogether. Usually this takes place in from a few days to a few weeks; then firmer massage, active and passive movements, vibration, electricity ionisation can be used to advantage.

We have already seen that the impressionability of many patients begins to improve after a while, and that by means of this they rebuild their memory again.

Gregor and Meyr report encouraging results with systematic mnemonic and calculating exercises.

Eleven of my patients have not recovered sufficiently to be discharged. A few become useless, helpless, hopeless chronics. Luckily, several could be trained to be fair workers again, and, under supervision, they make themselves quite useful.

Extracts from Notes of Cases shown at the Meeting.

P. C—, No. 1,307. Admitted July 9th, 1905, æt. 40, barber.

The attack started with delirium, which had not quite passed off on admission. Admits a good many "tots" every day since 1881. Neuritis of legs. The amnesic syndrome complete. Foul-mouthed and quick-tempered. Few hallucinations of sight.

April 9th, 1906.—Still complains of pains in legs. Fabrications less marked. Amnesia remains the same. Easily loses his way in the grounds.

April 27th, 1915.—During the last years his condition has remained stationary; his hair-cutting capacities have much diminished. Lies about idle best part of the day; shows few interests, except for his immediate needs. If addressed, always very affable and polite. He can give a fair account of his previous life, his statements *re* dates, names of employers, etc., are always the same and evidently correct. Since a period shortly before the Boer War the great bulk of his recollections has vanished. He knows the name and the nature of the institution, knows only two or three names of the staff and inmates. Has no idea of date. Thinks he has been here nine or ten months. Impressionability greatly impaired. Cannot reproduce a test number of four figures at all. Of twelve simple pictures shown to him he recollects three with difficulty; remembers most of the rest when they are mentioned again, but easily makes mistakes on leading questions.

Patella reflexes weak; Achilles reflex absent. Hyperalgesia of legs.

Sensibility for vibration impaired outer malleoli, hardly felt at all on inner malleoli.

J. R. M—, No. 1,435. Admitted February 4th, 1906, æt. 32, baker.

Admits half a bottle of whisky and more daily for last three years; a regular, but moderate, amount before that. Neuritis of legs. Pupils react sluggishly to light. The amnesic syndrome complete.

February 27th, 1907.—Amnesia a trifle improved; useful, but mechanical, worker in kitchen.

November 21st, 1907.—Memory as bad as ever; fabricates occasionally.

September 7th, 1913.—Dull; amnesic; no idea of passage of time; works in kitchen.

February 2nd, 1914.—Gradually improving. Gives a fair account of previous history. Shows more interests. Is anxious to be discharged. Impressionability still impaired.

April 29th, 1915.—Orientation good, also for time. Has insight into past condition. Says that memory is still not good; specially not if questions are sprung on him suddenly. Knows the names of most of the people round him. Reproduces four figures correctly. Only three out of twelve pictures, but he recollects the rest when they are mentioned again; no mistakes either spontaneously or on leading questions.

Reflexes: sensibility normal.

This patient is one of the two late partial recoveries, and will soon be discharged, in care of his brother.

A. J. M—, No. 1,536. Admitted July 13th, 1906, æt. 42, secretary.

He is a similar case to the foregoing. His impressionability and memory remained greatly impaired for seven years, also his orientation for time, while his active fabrications had stopped. He worked in the clerk's office, but had to be carefully supervised. It happened that he could not find his way back to the office, when he was in the corridor, at only a few yards distance from it. After these seven years impressionability and memory began to improve gradually, but it remained somewhat patchy, *i.e.*, certain things he could remember quite well, many of them being unimportant trifles, such as birthdays, street numbers, initials of patients, whereas more important ones would often slip his mind. March, 1915, he was discharged; he could not reproduce a test number of four figures, only knew that there had been four figures. He reproduced six out of twelve pictures shown to him, and the rest, bar two, when they were mentioned again. Patella reflexes both very weak, Achilles absent. Sensibility for vibration impaired both legs.

A fortnight after his discharge he relapsed into his old alcoholic habits again, and for a few days showed great confusion, and the four symptoms of the syndrome. From this attack he recuperated quickly, and got back to the condition on discharge. He remained in his room; nothing has been heard of him since. In the literature at my disposal I have not found any reference made to similar relapses.

A. S—, No. 3311. Admitted April 13th, 1912, æt. 41, groom.

History of many drinks daily, average six to eight for several years. The attack started two months ago with a mild delirium. Since then

his legs have become paralysed. He is unable to stand or walk, rough power of legs greatly impaired. Considerable wasting of legs. Severe pains and tenderness on deep pressure over the long nerves. Reflexes absent. Sensibility grossly impaired. Glossy skin on feet, scales; decubitus over sacrum. Pupils normal. Speech slow and slurring. Dull, indifferent, clouding of consciousness. Amnestic syndrome complete.

April 20th, 1912.—Less clouding of consciousness, shows more interest, converses freely, fabricates. Wet and dirty.

April 27th, 1912.—Trophic changes less, paresis improving.

August 8th, 1912.—Can walk a little with help. Impressionability and memory improving very slowly, one day better than the next.

January 25th, 1913.—Can walk fairly well. Remains dull, apathetic, amnesic. Patella reflex weak; Achilles reflex absent.

April 12th, 1915.—Gait still a little slow and stiff. Reflexes normal, except Achilles, which are absent. Sensibility normal except for slight hyperalgesia of legs. Impressionability remains impaired, reproduces 7294 as 741, reproduces three out of twelve pictures, the rest, bar one, when they are mentioned again. He knows the year, month, and day, not the date. His estimation of the passage of time is poor. Only knows very few names of the people around him. Shows very few interests, is dull, listless, lazy.

C. H.—, No. E. 328. Admitted April 3rd, 1914, æt. 60, traveller.

The attack started with a delirium. Heavy drinker for several years. Arteries palpable, tortuous. Slight tenderness on deep pressure in legs, slight impairment of sensibility. Affable, shows interest in what is going on. Amnestic syndrome complete. Many mistakes of identity.

June 10th, 1914.—Gives a different hour, day, date every time he is asked. Never knows the name of the doctor, although it is given to him every day. Says: "I was never indiscreet enough to ask your name." Fabrications very marked and varying. One night he was taken over to the Pretoria Hospital to be demonstrated—shown, walked back over the veld with the medical staff late. The following day he gave this version: Somebody, whom I had never seen before, called for me and we walked to different houses where we enjoyed music and tea. Are you asking this because going out like this is not allowed? I am very sorry that I did not ask your permission first; however, I was not away very long, perhaps five minutes, and I came back very early. He varied the details of this tale when he was questioned again.

August 1st, 1914.—Impressionability and memory slightly improving. Fabrications much less. No hallucinations.

November 13th, 1914.—Attack of dysentery; very weak. Nightly hallucinations, delirious. Fabrications marked.

February 20, 1915.—Gets periods of excitement. Hallucinations of sight and hearing, delusions about King and Queen of Denmark (mentioned *supra*). At times he states that the whole place belongs to him, becomes very cross because the other patients get tobacco without his permission. Works well in the garden.

April 12th, 1915.—Reflexes, sensibility normal, except for slight impairment of deep sensibility. Pupils slightly irregular, reaction rather poor, both to light and to accommodation. Cannot reproduce four

figures, and not one picture out of twelve. Only five of the rest, when they are mentioned again, says that is work for children. Finds his memory pretty good, does not consider that there is anything the matter with him, or with any of the other people. Affable and fairly lively. Works well in garden, shows interest in what he is doing. Same tales, *re* King, at times excites himself over this, urges the doctor to take action at once.

E. C.—, No. E. 435. Admitted October 8th, 1914, æt. 35, book-maker's clerk.

For several years drink to excess, up to twelve whiskies and a couple of stouts daily. Had an attack of delirium tremens twelve months ago; this attack started six weeks ago, with delirium. Also one "epileptic fit."

On admission he is physically very ill; emaciated; commencing decubitus over sacrum. Paresis and atrophy of legs. Reflexes exaggerated. Tenderness and pains in legs. Sensibility not grossly impaired. Unable to stand.

Pupils irregular, unequal, right reacts poorly to light, much better to accommodation. Speech indistinct, slurring, tremulous; he misplaces and repeats syllables.

Attention poor; clouding of consciousness; amnesic syndrome complete. Fabrications very marked, varying, contradictory. Hallucinations of sight and hearing. Habits faulty.

October 22nd, 1914.—At times dull, confused, or depressed; or very talkative, cheeky, troublesome, destructive.

November 6th, 1914.—Delirious, specially towards night. Syndrome complete. Physical symptoms the same.

The whole picture was very suggestive of general paresis, but the findings in blood-serum and cerebro-spinal fluid were entirely negative.

In the following weeks slow gradual improvement, mentally and physically.

January 1st, 1915.—Slightly despondent, slow, lazy, untidy; no initiative. Shows hardly any interest except for billiards, which game he plays very well indeed.

February 12th, 1915.—Brighter, more interests, works better. Fabrications quite stopped. Impressionability: Reproduces six out of twelve pictures, the rest when they are mentioned again. Insight imperfect, does not think he was ever very bad, suspects that he was drugged. Walks quite well now.

April 30th, 1915.—Insight better. Still has a suspicion that he has been drugged, but he is open to argument. Impressionability still improving, specially for every-day events. Reproduces seven out of twelve pictures, the rest when they are mentioned again; does not make mistakes on leading questions.

Reproduces 7,294 as 7,921.

Patella-reflexes average. Achilles very weak, unequal. Sensibility normal. Left pupil slightly irregular; reactions of both normal.

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(¹) Read at the May meeting of the Pretoria Branch of the British Medical Association.—(²) In order to be brief, I shall refer to patients with the amnesic syndrome on an alcoholic basis, as to "Korsakows" or "amnestics."—(³) Since this paper was read he has died; at the autopsy a tumour of the hypophysis was found.—(⁴) See notes of cases.—(⁵) In the discussion Dr. Dunston remarked that he had found that age was an important factor in the prognosis. This is borne out by my cases: none of the seven recovered patients was over 50 years (average 39.6) and the three with slight defect were between 40 and 50. Amongst the rest, however, we find also ages on admission of 32 and 35.—(⁶) Since this paper was read one more patient, male, died, which brings this figure up to 13.3 per cent.

Clinical Notes and Cases.

Pachymeningitis Interna Hæmorrhagica as a Cause of Death. By H. D. MACPHAIL, M.A., M.D., Senior Assistant Medical Officer, City Asylum, Gosforth, Newcastle-on-Tyne.

THERE are some pathological conditions which, though of considerable interest to the student of morbid anatomy, appear to have very little importance from the point of view of clinical study. The reason for this, sometimes at least, lies in the fact that it is difficult, if not impossible, to diagnose the onset and follow the progress of the morbid process during the life of the patient. Pachymeningitis interna hæmorrhagica is essentially a condition of this kind. It is a morbid state which has been named and described for years, and yet it is a condition the

diagnosis of which during life is extremely difficult. As a rule, when it is demonstrated at the *post mortem*, the clinical records of the case furnish us with no definite information suggestive of its presence. Often when symptoms point to the likelihood of its presence no lesion is found, while it occurs in cases which during life showed nothing special to indicate the possibility of such a condition.

This being so, it would appear to be of interest to describe the clinical course and *post-mortem* changes found in a case in which this was the prominent lesion, and the only ascertainable cause of death which supervened on a train of definite symptoms:

D. S. B—, was admitted on June 3rd, 1913, suffering from a first attack of acute melancholia. He was a male, æt. 25, well nourished and of good physique. Previous to admission he had made two definite attempts at suicide. His mental state was one of intense depression with delusions of unworthiness, and marked suicidal tendencies. He required forcible feeding on several occasions, and had recurring outbursts of violent excitement. He showed no signs of improvement under treatment, and at the end of seven months there was practically no change in his condition. This was the state of affairs when he was attacked by the illness which proved fatal.

On January 2nd, 1914, he had a cerebral attack, which came on without any warning, and which led to speedy loss of consciousness. When seen a few minutes after the onset he was found to be quite unconscious. His breathing was noisy and stertorous. His corneal reflex was gone, his pupils were widely dilated, and did not react to light. His pulse was full and strong. His limbs were quite flaccid. The plantar reflex gave an exaggerated extension of the big toe on each side, with no movement of the other toes. There were no convulsive movements. He never regained consciousness; the coma deepened gradually and steadily, until he died at 8.30 p.m.

Next morning a *post-mortem* examination was held. When the skull-cap was removed the dura was seen to have a very dark appearance. On reflecting this membrane there was seen to be an extensive internal pachymeningitis. The whole extent of the membrane lying in contact with the cerebrum on all its aspects was found to be covered with blood-clot. It was also present on the upper surface of the tentorium, but there was no involvement of its under surface, the parts in the posterior cranial fossa being unaffected. The clot was adherent to the dura, but stripped off quite readily. It was dark red throughout, was quite soft, and showed no trace of organisation. The surface of the cerebrum was very dry, and on dissection the brain substance was abnormally dry. Apart from these changes the brain appeared to be healthy. There was no atrophy, and no evidence of other disease.

The other organs of the body were engorged with dark venous blood; otherwise they showed no change of any importance.

This case, as regards both the clinical features and the *post-mortem* findings, shows several interesting points, and differs in many respects from the usual cases in which internal pachymeningitis is found. As is well known this disease process is of common occurrence in the insane, being quite frequently found on *post-mortem* examination—*e.g.*, Osler in his text-book quotes statistics of 1,185 examinations, in 197 of which it was present—*i.e.*, 17 *per cent.* The patients in whom it is commonly found are those who have suffered from chronic mental disorder of long standing, especially where there is well-marked gross atrophy of the brain. It is an affection which chiefly occurs in later life. Osler and McCrae quote statistics in which 41 *per cent.* occurred in patients between 60 and 80 years of age, and 31 *per cent.* in persons between 40 and 60. As usually happens, its discovery is merely an incident in the course of the *post-mortem* examination, it being found in cases which showed nothing special during life to indicate the likelihood of its presence, or in which any symptoms which were present were too vague and indefinite to allow of a diagnosis. Its occurrence has also been recorded in adult males who have been addicted to extreme alcoholic excess: here there are found in addition degenerative changes in the heart, blood vessels, and kidneys.

As regards the clinical features, those which are believed to be of diagnostic importance are great pain in the head, and well-marked convulsions. Rigidity of an extremity is also frequently present. Those are all symptoms which are due to cortical irritation.

In this case, on the other hand, we find an entirely different state of affairs. We have a young robust adult male who is the subject of a recent attack of acute mental disorder. There is no history of alcoholism, and nothing occurred during the course of his illness to indicate the presence of gross brain change. He suffers from a sudden cerebral attack, becomes rapidly comatose, without any symptoms pointing to cortical irritation, and dies within six hours. At the *post mortem* no lesion except hæmorrhagic pachymeningitis can be found.

When we correlate the clinical features with the *post mortem* findings, there appears to be no doubt that the sequence of events was due to the fact that the patient suffered from a sudden and copious hæmorrhage. The sudden onset, the

presence of symptoms pointing to intra-cranial pressure, with the absence of features due to cortical irritation, and the rapidly deepening coma, all go to give support to this theory. The *post-mortem* findings appear to confirm this view—the large clot, with the evidence of cerebral compression, and the absence of other morbid changes in the brain and other organs.

The interest in this case lies in the unusual combination of circumstances. Pachymeningitis interna hæmorrhagica is certainly quite a common condition, but it is a condition which usually accompanies gross cerebral lesions which of themselves are sufficient to cause death, while here we have this pathological condition occurring in an otherwise healthy individual, and find that it is the only lesion present, and the sole cause of death.

While it is extremely difficult to estimate the effect this condition has upon the clinical course of the patients in whom it is usually found, it must be very rare to have this lesion in a marked degree demonstrated in a case in which there is no other evidence of disease.

A Case of Insane Impulses in an Asthmatic Patient.

By H. M. EUSTACE, M.D., B.Ch. Dublin, Medical Superintendent, Hampstead and Highfield Private Asylums, Glasnevin, Co. Dublin.

D. C. G—, admitted to Hampstead on April 28th, 1914, æt. 43. Married, first attack.

Family history.—Good. A maternal aunt was insane. No epilepsy in family.

Previous history.—Early in his life patient was not temperate in the use of alcohol, but he has been steady for the last twenty years, and working well at his profession. In the autumn of 1913 he had his first serious illness—pneumonia—and he was obviously greatly reduced by it. His medical attendant informs us that the patient was delirious during this illness, but not gravely so, and he was nursed only by his sisters. In his adolescence he suffered frequently from severe asthma. He married during the winter following his pneumonia and went to South Africa for his honeymoon. He had some asthma on board ship on the homeward voyage, and he took a mixture which I found out afterwards contained KI. He was greatly depressed at Madeira on the way home, where he first got news of the death of his favourite nephew.

Physical condition.—The only abnormalities were a slight dry cough, some retraction of the left side of the thorax, some carious teeth, and a recent scalp wound. Wassermann's test gave a negative result. The onset of the patient's fulminating attack of insanity was marked by a

period of slight depression, inasmuch as the patient is said by his relatives to have been very silent and out of sorts for two days. On the third day he stated to his wife: "My brain has gone." Accordingly she sent for a doctor, and when she was talking to him the patient suddenly threw himself over the banister rails on to the paved hall, and proceeded to bump his head vigorously on the flags, till he sustained a scalp wound. As soon as this was stopped, his family suggested that he should have his dinner! Patient took his usual place at the head of the table, but instead of carving the joint he took his throat in his left hand and the carving knife in his right hand. His father shouted to him to put down the knife at once. The patient then went for his aged father with the carving knife, but his intentions were frustrated. He was given hyoscine and bromide, was attended to by two male nurses, and sent to us on the following day, having been given morphia sulphate $\frac{1}{2}$ gr. before starting on his journey. He remained partially under the influence of the morphia for two days and then cleared up admirably.

A month later it is noted that patient has been on cod-liver emulsion, he has lost his cough, and is gaining in weight every week. He is always of a cheery disposition, and enjoys all outdoor games. He has a genuine affection for his family. All this goes to show that he has not exhibited any sign of a desire for self-destruction since his admission. He has not resented finding himself in an asylum. On being questioned he states that he felt compelled "to take a dive into the hall at home." He remembered that part of the tragedy, but he was greatly shocked on hearing how he had terrified his father afterwards at the dinner table.

On June 11th he complained of slight asthma, but it was not noticeable to us.

On July 20th we learned for the first time that the patient had told a member of his family that he—the patient—had lived on champagne coming home from Madeira; but the patient's wife, who is a singularly intelligent woman and no fool as regards the frailties of mankind, was quite certain he was not drinking on board ship.

On July 21st, 1914, he was discharged "recovered."

Undoubtedly the patient was much run down physically before the impulsive propensity to injure himself came on with such appalling suddenness. He had suffered from a severe pneumonia; he had married when only convalescent; he had some asthma on board ship, and he had taken a drug, *viz.*, KI, which even in small doses can reduce a strong man to tears.

The connection of asthma with insanity is more usually of an alternative nature, and I can recall the case of a lady at Highfield who suffered from asthma till she became acutely maniacal. She remained a chronic maniac for the rest of her life, but had absolutely no return of the asthma.

The medico-legal aspect of all cases of so-called "impulsive insanity" are most interesting. Balfour Brown points out

that "one must remember that a mistake is not a proof of mental unsoundness, nor is folly an indication of insanity." He then mentions the case of a Greenwich pensioner, who—on his allowance being stopped—stabbed himself with his spectacles.

How can we explain the impulsive insanity of my case, D. C. G—? If he were epileptic, acts two and three of his tragedy might then be considered automatic, but he never presented any symptoms of *petit mal* or *grand mal*.

What part did alcohol play in this case?

Norman Kerr mentions "marine cases of inebriety," and we are all familiar with the humorous types of this affliction in the stories of W. W. Jacobs, but, seriously considered, Kerr believes that the pathological types "are usually preceded by a pathological cerebral disturbance, uneasiness, dread of impending trouble and depression." He also says: "The phenomena of the inebriate paroxysm are analogous to the phenomena of spasmodic asthma, with this marked difference, that salt water and sea air appear, as a general rule, to relieve the asthmatic paroxysm, while they generally provoke the inebriate paroxysm." But this case of D. C. G— was always more asthmatic when near the sea, and he complained of it on board ship. Many will consider him a case of *mania à potu*. He had no delusions, no hallucinations, and the attack came on almost without warning.

Kerr recognises a state of "inebriate automatism" in such cases, and it is possible that acts two and three in our patient's tragedy were committed in this state. On the other hand we have his wife's positive statement that patient was not drinking, and as she was filled with anxiety lest this suicidal tendency should come on again she would almost have been pleased to think that it was the result of alcoholism instead of some mysterious flaw in his composition.

Record of a Case of Pregnancy occurring in a Female suffering from General Paralysis of the Insane.
By H. M. RASHBROOK, M.B., B.S.Lond., Assistant Medical Officer, Claybury Asylum.

The birth of living children to female general paralytics, in whom the symptoms have so far advanced as to bring

them under asylum treatment, is of a somewhat rare occurrence.

A case of this nature, made the more interesting by the fact that the eldest child of the patient is also now under treatment as a juvenile general paralytic, coming under my care, Dr. Mott suggested that I should place it on record.

Dr. Robert Armstrong-Jones, the Medical Superintendent, having given me permission to use his notes as well as my own, a very full account of the case is available.

E. S. M—, æt. 37. Admitted to Claybury October 31st, 1914. First attack.

History prior to admission (from husband).—Her illness commenced seventeen days before admission, when the husband was called to her about 8 p.m. by his young son as she appeared ill. He found her seated on a chair staring in front of her, and put her to bed. During the night she was noisy, restless, and tore up her nightdress and the bed-clothes. Next morning she was sent to the infirmary, whence she was removed to Claybury.

On questioning the husband, he stated that beyond at times being a little forgetful she was, as far as he could judge, sane and healthy.

Condition on admission.—Mental state: She could answer simple questions and obey simple orders, but after a few minutes' effort she became rambling and incoherent. Her speech was slurred and hesitant, her reaction time increased, and she was grossly amnesic. Left pupil larger than right, neither reacted to light, but both to accommodation. General paralysis of the insane. Physical condition: Examination showed that the patient had reached an advanced stage of pregnancy, the uterus reaching to the subcostal angle; the foetal heart was heard on auscultation. The only other abnormal condition present was an extensive herpetic eruption on the left side corresponding to the area supplied by the seventh, eighth, and ninth dorsal nerves.

Progress of the case.—At 6 a.m., two days subsequent to admission, the patient commenced to have epileptiform seizures. The next morning, at 5 a.m., the patient became restless, and it was then found that the foetal membranes had ruptured and labour had commenced. About one hour after the first examination an apparently healthy male child, weighing 6 lb., was born without difficulty.

A specimen of blood was obtained from the umbilical cord, and a Wassermann test done on the serum gave a markedly positive reaction.

The child was kept under observation in the asylum for six weeks, and when finally discharged was thriving and showed none of the stigmata of congenital syphilis.

After the birth of the child the seizures recommenced, the patient developed broncho-pneumonia and died on the day following.

A *post-mortem* examination by Dr. Mott confirmed the clinical diagnosis of the case, which was also corroborated by *post-mortem* specimens of the blood and cerebro-spinal fluid, both giving markedly positive Wassermann reactions.

Cause of death.—Broncho-pneumonia; general paralysis of the insane.

Family history.—The patient and her husband were both second children of unrelated families, and in neither case was there any family history of insanity, epilepsy, or hereditary tendency to physical disease. The patient had been married fifteen years, and was a general servant previous to her marriage. The husband has been in the Navy, which he left ten years ago, and whilst in the Service was under treatment for two months for gonorrhœa. There were five children of the marriage, of whom the following accounts have been obtained.

(1) Boy, æt. 12, juvenile general paralytic. He has a spastic gait, marked tremor of his facial and tongue muscles, high arched palate, dilated pupils which react sluggishly to light. His memory is impaired and he is faulty in his habits. Wasserman test on serum positive. For the above description of the case, and the blood specimen for the Wassermann test, I am indebted to Dr. Beresford, the superintendent of Tooting Bec Asylum, where the case is now under treatment.

(2) Boy, æt. 9, at school, apparently well and healthy.

(3) Girl, died of "pneumonia" in infancy.

(4) Girl, æt. 5, apparently well and healthy.

(5) Boy, child born in Claybury Asylum.

Although I was unable to test his blood, it is reasonable to suppose that the husband contracted syphilis whilst in the Navy, and infected his wife soon after marriage. The firstborn child is a juvenile general paralytic, and the last born, even though it presents no physical signs of congenital syphilis, has inherited the taint as shown by its serum reaction. It is also probable that the intervening children are syphilitised, although I have been unable to obtain specimens of their blood for the serum test.

The question of syphilis in this family was not suspected until both the mother and eldest child came under asylum care. The fact that the husband has shown no symptoms of the infection seem to put him in that mild class of syphilitics alluded to by Dean (*Proc. Roy. Soc. Med.*, Syphilis Number, 1913) in which a positive Wassermann reaction might be the only sign.

The importance of the diagnosis of latent syphilis is emphasised by Dr. Mott in his report to the International Medical Congress, London, 1913. In this report he quotes the results of Plaut, who showed by sero-diagnosis the widespread character of the infection in the families of general paralytics; thus, in fifty-four families, 31·6 *per cent.* of the wives of paralytics gave a positive reaction, whilst 37·5 *per cent.* of the husbands of paralytic women were positive. In only 38 *per cent.* of the cases was syphilitic infection of the spouse or offspring not found. Cases with a history and clinical evidence of transmitted syphilis were remarkably few. Another interesting instance of these facts is found in the family history of a

juvenile general paralytic from Cane Hill Asylum published by Dr. Wootton (*Journal of Mental Science*, October, 1914). Here the father, mother, and two out of three apparently healthy brothers and sisters all gave positive results to the Wassermann test, although all knowledge of syphilitic infection was denied.

The disastrous results here noted of unsuspected and untreated syphilitic infections, and the impotence of all treatment at the present time in checking the progress of general paralysis, argue strongly in favour of the use of the Wassermann test in all suspected venereal conditions, with a view to their appropriate and early treatment.

In conclusion I must thank Mr. S. Mann, who has helped me with the serum reactions, the technique used being the original Wassermann reaction as employed in the Pathological Laboratory of the London County Asylums, and described by Candler and Mann in the *Archives of Neurology and Psychiatry*, vol. vi, "The Wassermann Reaction in Mental Disorders."

Occasional Notes.

The War and the Journal.

THE gigantic struggle which is now convulsing the greater part of the continent of Europe—a struggle for existence in the case of at least some of the belligerent Powers engaged—is making itself felt in all departments of life. Politics, business, recreative pursuits, social functions of all kinds, art, science, and literature, all feel the overshadowing influence of the colossal contest. In some spheres of work it has had a stimulating, in others a benumbing effect. In everything connected with our military and naval operations there has been, and is, naturally a prodigious increase of activity. It is imperative that urgent needs should be supplied, and existing organisations, sufficient to meet the demand under ordinary circumstances, must be vastly extended and supplemented. Here all is at high pressure; nothing evident but rush, bustle, and boom. On the other hand, in the quieter paths of human industry, in which may be included scientific pursuits (not those connected with war), with scientific literature as their outcome, an opposite

condition is apt to occur, with more or less stagnation of effort. Mars is an unwelcome visitant, his sword a disquieting element in the groves of Academus. And while in some departments of journalism, such as those of our daily and weekly press and monthly magazines a state of war provides not only an enhanced stimulus to busy pens, and also almost a superabundance of material, an *embarras des richesses*, in the case of scientific literature, during such crises, effort is more or less cramped and impeded, and the fruit of the studies which are the basis of it forms but a meagre crop. Our own Journal cannot hope to escape the experience which is produced by stress of circumstances, and if its dimensions become somewhat attenuated, and its material curtailed, allowance must be made for difficulties which attend its production at the present time. To realise these even in some measure it is only necessary to call attention to the fact, known to most members of the Association, that quite a number of medical men on the staffs of asylums have volunteered for service in both Army and Navy. This has thrown an enormous amount of extra work on the shoulders of many of the senior officers and the remaining members of the staffs. And especially has this been the case where an asylum has been obliged to be converted into a war hospital, and provision has had to be made, hurriedly made, against time, for the accommodation elsewhere of hundreds of insane patients, as well as special preparations and modifications of existing arrangements in such asylums for the reception of our wounded and convalescent soldiers and sailors. These unwonted operations on such a large scale are more than sufficient to absorb the entire time and attention of all those responsible for their accomplishment, and on many of our colleagues the strain has been exceptionally severe, notwithstanding which the ordeal has been willingly accepted and carried through with zeal, enthusiasm, and, best of all, with efficiency and success. But labours such as these are absolutely prohibitive of effort in any other direction, and, consequently, it need not occasion surprise if the Journal suffers from being deprived of the valuable aid of members who are devoting their energies and giving of their best to the service of their country in response to what is perhaps the noblest of all claims—the call of patriotism. This much is offered by way of apology if, during the time while the war continues in

progress, the Journal in certain respects falls somewhat short of that standard of merit which previous experience may have taught its readers to expect.

Proposed Legislation re Cases of Incipient Insanity.

IT is not necessary to emphasise in these columns the fact that for many years past resentment has been growing with increasing strength against the strictness, one might even say the harshness, of English Lunacy Law in relation to those patients who stand on the threshold of confirmed insanity. This Association, in common with other bodies, has attempted to get that strictness modified, where modification is, in its opinion, justifiable. The want of success in these endeavours is the more galling because in the sister kingdom, which later than England undertook the rescue of the insane from neglect and cruelty, foresight and science combined to effect that for which England still longs. The success which from the first has attended in Scotland a step that was indeed an experiment, in days when public alarm rather than public altruism controlled procedure, is sufficient to support an allegation of denial of justice in England to those whose need for consideration is pressing. That which was deemed good in days when so little was known of the problems surrounding insanity, must surely be not only good, but of essential importance also now that both scientific industry and clinical observation have advanced a long way, and are still advancing, towards the solution of those problems by way of more enlightened treatment. Popular prejudice is a strong opponent, and easily aroused. But that it can be beaten down in time by a successful administration of truth has been recently proved by the passing of the Mental Deficiency Act in the face of strenuous and capable obstruction. It cannot, however, be hoped that success will come until there is something like unanimity among those seeking it. Most unfortunately, on more than one crucial point even the most liberal-minded men differ absolutely. For instance, certification except when the disease is fully confirmed is considered very generally to be undesirable, and most people, whether experts or not, would wish to see it avoidable. But on the controlling factors, such as detention, *locale*, notification, etc., there appears to be great divergence of opinion. Detention has in this matter

voluntaryism as its antithesis. Some *projets-de-loi* contemplate the latter being the foundation stone of any legislative concessions. Many, if not most, of those experienced in the clinical aspect of mental disease confidently assert, on the other hand, that any step which either forbids or does not provide for detention when the initial voluntary submission to treatment is found to be unobtainable, is not only useless and illusory, but leads to dangerous waste of time.

Then on the question of *locale* some would have all concessions to be dependent on resort to an institution or to "approved homes." Others maintain that incipient cases should be kept away from all contact whatever with their fellow sufferers; while, from another point of view, objection has been raised to the waste of time which might be involved in seeking an officially predetermined home, and the formalities attending admission thereto. Again, notification involves the consideration of the form in which the justification for treatment is stated, and this is a very delicate matter. If it contains too little, then danger may arise. On the other hand, if it is too specific, it becomes in effect a certificate of mental disorder, however much trouble may be taken to conceal this fact by giving the document another name.

Two Bills, the text of which will be found on pp. 480-485, have been submitted to Parliament, and have met a not uncommon fate. This has occurred simply from pressure of urgent demands on time, and not as the result of any discussion of their merits. They illustrate some of the diversities of opinion mentioned.

The Mental Treatment Bill, introduced by Mr. Cecil Harmsworth, is a simple and bold endeavour to procure easy and suitable treatment without undue formality. Its object is to do away entirely with all certification for entering a nursing home, all the machinery being left for settlement by governmental authority. Though detention is not specifically forbidden it is still left illegal, under the Lunacy Acts. The operative clause (1) of the Bill only removes penalties for receiving to board and lodge or take charge of the patients specified, whereas Section 315 of the Lunacy Act, 1890, includes detention, which thus remains a statutory offence. Though we think that the omission of power to detain is unfortunate, and though we think that some exception can be taken to the extremely wide definition of the patients proposed to be treated

under the Bill, it seems a pity that in the emergency set out in the memorandum, the experiment could not have been tried, the more so as the operation of the Act would have been confined to six months duration, at the expiration of which period it could have been brought to an end, or renewed if found to be successful. At the same time it must be admitted that, both in elaboration and administration, it would have cast a large burden on the shoulders already over-burdened by cognate duties.

The second Bill for Voluntary Mental Treatment was introduced by Earl Russell. It has more permanent aims and may be regarded as a project which will again see the Parliamentary light at some future date. Therefore, though its aims in many respects appeal to us, we feel justified in offering some criticism. The Bill deals only with voluntary submission to treatment, and in that respect stops short of usefulness in our view. It is true that it would confer some benefit, but experience suggests that those who may benefit will be extremely few, being confined to those comparatively rare persons who can be persuaded that their mental apparatus is out of joint. It will be admitted that besides these there are a considerable number of cases who would also benefit by the avoidance of certification, who, however, energetically resist an allegation of mental ill-health, and in token thereof would refuse to enter any home voluntarily, or, if they could be persuaded to enter, would not stop if their claim to sanity were not admitted. It is conceivable that if the Bill as it now stands were passed, injustice would eventually result for this latter class.

It is doubtless assumed by the supporters of this Bill that the term voluntary will prevent criticism by those who are apprehensive of possible evil consequences from any interference with the liberty of the subject. In our opinion, such critics are not unlikely to denounce this Bill as the thin end of the wedge; and when a further Bill is introduced, as it must be sooner or later, to give the benefit of non-certified treatment to all incipient cases willing or unwilling, the chances of its passing would be lessened by the fulfilment of prophecy. For these reasons we believe that it is absolutely necessary to attack the question of modified treatment of incipient insanity as a whole, claiming power to admit those patients who so desired on their own initiative, and also power of detention for a specified period,

should it be necessary to ensure the safety of the patient. This is parallel with voluntary admission under the Lunacy Laws. A good point in the Bill is that it seeks to extend voluntary admission into all classes of institutions for the insane and also to general hospitals. We are somewhat at a loss to know why it should be provided that a person undergoing treatment in accordance with the provisions of the Bill should not be *removed* from England without the previous consent of the Board. If a man has sufficient will power to enter a house for treatment why should he not have power to go where he wills? The word "removed" has about it a suggestion of external influence which is foreign to the sense of untrammelled freedom pervading the Bill. Nor can we see why the Statement, accompanying the authority for reception, should include the query "Whether dangerous to self or others." It would seem to suggest the possibility of a medical man holding the opinion that an incipiently insane person, dangerous to himself or others, is not certifiable under the Lunacy Acts. In any case, an ordinary individual, not in the least concerned for the liberty of the subject, might well look askance at a Bill which contemplated the possibility of a dangerous person being left free to leave his new home at his own pleasure.

The spirit in which these two Bills have been conceived is admirable, but we cannot think that the provisions of the Voluntary Mental Treatment Bill are the best for giving effect to that spirit. Nor are we quite sure that it is required. Assuming that the patient is declared by a responsible medical man of good standing *to be non-certifiable under the Lunacy Law* (the qualification for treatment under the Bill), it is hardly conceivable that the receiver would be proceeded against by the Lunacy Authorities. It might be different if the less pronounced condition passed into certifiable insanity. Then under this Bill, as well as under the existing statute, the penalties for offence would *ipso facto* revive.

Part II.—Review.

The Story of Bethlehem Hospital, from its Foundation in 1247. By EDWARD GEOFFREY O'DONOGHUE, Chaplain to the Hospital, formerly Stapledon Scholar of Exeter College, Oxford. London: T. Fisher Unwin, 1914. 140 illustrations. Pp. 427. Price 15s. net.

The title of this volume indicates the nature of its contents. It is not a history—a systematic arrangement of events—but a story—a more or less irregular account, at times imaginative and picturesque—of one of London's most ancient institutions. It has been laboriously put together to create an interest in a subject repugnant to many outside the alienist world, and to present in an attractive fashion the historic facts bound up in the building. The author has succeeded in all this admirably, for despite certain parts of the book which, though full of interest in themselves, are yet somewhat irrelevant to the subject, he has produced a fine volume, which will rivet the attention of general readers as surely as it will of all those attracted to the study of insanity or attached to the Hospital. Mr. O'Donoghue writes with such enthusiasm and evident love of the Hospital, which is fortunate enough to have him as chaplain, that he disarms criticism of his peculiar literary style and constant touches of justifiable egotism. Considerable historical research is shown, for the beginning of his story necessitates steps backward to the uncertain records of the year A.D. 330, when the Basilica of the Nativity was built in Bethlehem by the Emperor Constantine. It is probable that the monastery attached was the first hospital ever founded. We find in the Encyclical given by Pope Innocent IV in 1245 to the Bishop of Bethlehem exhortations to the faithful to give alms for its support as a place "offering shelter to the poor, the stranger, the pilgrim, and affording succour to all Christians in any other affliction." As this Encyclical was ordered to be read in Italy, England, and Scotland, and we note that in 1245 one Simon Fitz-Mary, an alderman of London, presented a part of his estate in Bishopsgate for the site, erection, and support of what was doubtless the first hospital in our country, he most probably was moved to this act of generosity by the Pope's pronouncement. Twice during its 700 years of existence has the asylum been removed—in 1676 from Bishopsgate to Moorfields, and again in 1815 to its present position in Southwark. The account of these changes affords the author opportunity to introduce lengthy, and at the same time most captivating, descriptions of the growth of London's city. Charing Cross and Trafalgar Square, which then were covered by Stone House and its grounds, came into possession of the Hospital about 1377, only to be confiscated in 1551 during the general scramble for property belonging to religious foundations. The descriptions of the locality and the numerous illustrations give a vivid idea of its entire change from country to town. The number of well-known names which have been connected in some way with the Hospital is very noteworthy, and in each case the book gives much, and often curious information. Hogarth, George Boleyn, Bunyan, Defoe, Fitz-Osbert, George Fox, John Howard,

Charles and Mary Lamb, Sir P. Mewtys, Monck, Sir Thomas More, Pepys, Dean Swift, John Wesley, G. Whitefield, Cardinal Wolsey, all pass across the stage and contribute their share to the story. It is strange that this Hospital seems to have followed very reluctantly the path of amelioration of treatment in asylums. The old *régime* for long obstinately refused admission to the new. Even in the seventeenth century Bethlehem was reported to be so "loathsome as to be unfit for any man to enter." But now, happily, it is in the forefront of institutions where life is made as tolerable as possible for poor souls bereft of reason. We congratulate Mr. O'Donoghue on the production of a scholarly volume, full of interest to all classes of readers, beautifully illustrated, and obviously the outcome of years of patient and laborious research, and we wish it a wide circulation.

Part III.—Epitome.

Progress of Psychiatry during 1914.

ITALY.

By DR. GIUSEPPE ZUCCARI.

1914 has also passed without any possibility of organising the XVth Congress of the Italian "Società Freniatria." This congress, which should have taken place at Palermo on October 10th last, has been postponed by the Council of Management to an indefinite date, owing to the results of the European conflagration. The general topics which await development remain the same as those we reported on in the epitome of last year.

Monsieur Morselli de Genes, one of our most illustrious clinicians, has this year devoted to the productive activity and to the cultural development of Italian alienists a periodical which has been largely re-modelled. In the *Quaderni di Psichiatria*, with a severely scientific character, there is associated a redoubled interest, very lively and extended, in practical questions connected with psychiatry, with the technique of asylums, and with problems relative to the speciality, and to legislation. M. Morselli especially deserves our gratitude for his constant desire to render conspicuous the work of Italian alienists who in the past have cultivated this science, and who have contributed to its really scientific and practical development.

M. Morselli has sketched out in the first number an extensive programme relating to the "meaning and object of psychiatry," with a view to enhance the faith and guide the work of younger students, and at the same time to emphasise and illustrate the fields of activity explored, and the ideals pursued, by more advanced workers. In the other numbers he has dealt with such subjects as the cellular architecture of the cerebral cortex in the morphological evolution of man, psycho-

physiological localisation and a cellular architecture of the cerebral cortex, and the presumed heterogeneity of morbid consciousness.

Amongst the other Italian reviews the *Rivista di Patologia Nervosa e Mentale* certainly occupies one of the first places. This review is very carefully drafted and directed by M. Tanzi. In the numbers of this year are to be found important studies in neuropathology, histology, and morbid anatomy; the physiology of the nervous system has also a prominent place in this book; and in it has appeared one of the first Italian works on the Abderhalden reaction (Zalla e Buscaino—*Sulla specificità dei fermenti proteolitici*). In this review, as in the *Rivista Sperimentale di Freniatria e Medicina Legale delle Alienazioni Mentali*, are published some remarkable studies of endocrinology in relation to mental pathology. This subject has developed in us a scientific curiosity and an interest in research with its mysteries and its promises, as well in the study of pathogenesis as in that of therapeutics. We recall also the studies on the thyroid, the pineal gland, the hypophysis cerebri, the suprarenal apparatus, and the genital organs. Amongst Italian alienists there are many who are occupied with serology, with histology, normal and pathological; others who demonstrate their activity especially in the field of clinical work; and others who are enamoured of problems in neuropathology and psychology, which have such a close connection with our speciality. It would be a too long and difficult task to speak of each work. It will suffice to quote the summary of our leading reviews, from the *Rivista di Neuropatologia*, conducted by Prof. d'Abundo, to the *Rivista di Psicologia*, conducted by Prof. Ferrari.

This year an event of prime importance has taken place: the appearance of second editions of two Italian treatises on psychology, those of Profs. Tanzi and Bianchi. They were already known in their first editions both in Italy and abroad (an English translation of both has been in existence for some years past). Of the latter only the general part has appeared. The work of M. Tanzi has been considerably enlarged. In augmenting the content of this volume he has followed the continuous increase in researches and in the fruitful conquests of psychiatry. In this task another of our leading alienists, Prof. Lugaro, has collaborated. Thus, from the co-operation of these two authors, whose lives and ideas were similar, has emanated a truly superb work, which is an honour to Italian psychiatry.

In the first edition of his treatise M. Bianchi employed as the basis of clinical psychiatry his solid knowledge and experience of the anatomy, histology, and physiopathology of the nervous centres. He first made a very comprehensive *resumé* of the conquests of contemporary neurology with respect to the architectonic plan of the human brain in relation to mental phenomena, from the most elementary to the most complex.

In the second edition, which has just appeared, he has abridged the part which contains the principles of anatomy and general psychopathology; anatomical data are confined almost exclusively to those parts of the encephalon which are commonly regarded as destined for psychical processes. M. Bianchi has conceived the idea that the passage from anatomical and physiological states to psychical phe-

nomena is a much more difficult matter than it appeared to be at the time of the first enthusiasm for morphology, histology, and cerebral physiology.

The content of the first part is of general character ; here is discussed the physiopathology of perception, attention, memory, ideation, emotivity, affectivity, and will. In each chapter we recognise the features of the first edition renewed and completed in a lucid exposition of the more modern conquests of psychopathology. M. Bianchi upholds the localisation of the articulation of words in a centre well determined. He thinks that language is a function of considerable complexity, and has a double origin, on the one hand in the field of concrete images, on the other in the field of abstract ideas. For M. Bianchi language is compounded of emotions and movements ; it is the vehicle of expression for conduct and states of consciousness ; it comprises, in fine, the entire brain. In the classification of morbid forms M. Bianchi retains that of the first edition. Very remarkable is the place which the author gives here throughout to dementia præcox. He cannot, knows not how to, abandon the trend of his thoughts in the anatomico-physiological direction. As regards this he remarks that if dementia præcox commences with mental decadence, our thoughts can only revert to some ill-defined cortical field. Whilst, if it is admitted that the malady commences with some sensory derangements, then the seat of the morbid process may be better determined, having as its point of origin the sensory areas of the cortex. M. Bianchi has, then, not been able to renounce his remarkable and definite scientific personality.

Of the treatise of Messieurs Tanzi and Lugaro there has appeared up to the present only the first part : a large volume of 672 pages, with numerous illustrations in black and white and in colour (146), which comprises the general portion. The second volume, which will shortly appear, will expound the treatment of each mental malady. The published volume commences with a chapter treating of the seat of psychical processes ; the last chapter treats of the classification of mental disorders in such a fashion as leads us to anticipate that in the second volume will be disclosed some classifications of a quite personal and independent cast. The order and development of the remaining chapters are no longer those of the first edition. Some are altogether new, such as those on psychical and on somatic examination. It is in this last chapter that the authors advert to the latest applications of the methods of Abderhalden when demonstrating the finest and most recent methods of serology. In the chapter which treats of the anatomopathological basis of mental maladies, the authors summarise in a very lucid manner the most recent findings with respect to the macro- and microscopic anatomy of lesions of the nervous system. Their descriptions of the lesions are rendered more complete by original illustrations, but what strikes us as more remarkable is the manner in which they draw their conclusions, and their synthesis of anatomical processes. The morbid anatomy of mental disorders reveals to us, according to the authors, numerous alterations from the normal. But as these alterations are never characteristic nor pathognomic of definite clinical forms, it is thus not possible for us to establish on the one side clinical syndromes,

and on the other corresponding anatomical changes. In this way we can understand forms of insanity with modifications which escape from the domain of anatomy, that is to say, with bio-chemical and functional alterations.

The bodily processes which determine madness are well explained. In the chapter which treats of the causes of mental maladies, the authors again advance the view already expressed by M. Tanzi, that cerebral fatigue and exhaustion ought to be neither recognised nor assigned any value in this connection, because the brain is endowed with inexhaustible activity. In the same chapter there is a very subtle analysis of psychoanalysis and Freudism. All the psychological portion has an extended and modern development. In every chapter which is concerned with mental aberrations, and in the different psychopathies of the function of mind, there is presented a summary exposition of the facts and corresponding laws in the region of normal psychology.

In the pathological section there is not merely a simple description, but an endeavour is made to analyse the relations of dependence between different psychical manifestations.

As to the classification of mental maladies, the authors propose to themselves the problem as to whether there are cases of mental derangement which do not admit of classification, and this in consequence of the numerous morbid combinations, and the different gradations between the mental malady and the normal condition, health. They give precedence to the view that the best means of discrimination are those based on ætiology. Thus, they take into consideration first the maladies due to exogenous causes (poisoning, infections, infantile and adult cerebropathies, senile involutional changes), afterwards the endogenous psychoses (affective psychoses). They uphold the view already expressed by M. Tanzi that the melancholic forms may be separated from the manic-depressive phrenosis, and in the last place they consider the perversions which derange the type of individual personality. (In this last group they include sexual perversions, constitutional immorality, intellectual weakness, and paranoia.) The position between derangements due to exogenous causes and the endogenous psychoses is represented by epilepsy and the thyroid psychoses. In the same category the authors also place dementia præcox, while observing with justice that individual causes, whether exogenous or endogenous, vary even in the most typical forms.

We may then conclude that all the sections of this volume have been ably compiled, with originality, and the maintenance of a just balance between all the various tendencies which at present dominate psychiatry.

T. D.

Epitome of Current Literature.

I. Ætiology.

The Contagion of Insanity [*La contagion de la folie*]. (*Revue Philosophique*, January, 1915.) Dumas.

In an article published in the *Revue Philosophique* of December, 1912, Dr. Dumas set out his reasons for dissenting from the opinion that mania and melancholia may be communicated by the insane to the sane. And in the present paper he proceeds to show that a similar attitude of scepticism is justified with regard to the contagious influence of the systematised hallucinatory psychoses—the form of mental disease in which the possibility of such an influence has been most frequently and most definitely asserted. Dr. Dumas adopts Marandon de Montyel's classification of cases of alleged insane contagion into three groups: imposed insanity (type Lasègue-Falret); simultaneous insanity (*folie à deux*, type Régis); and communicated insanity proper. To constitute true communicated insanity Dumas argues that there should be the development in a previously sane individual, who has been in prolonged contact with a sufferer from systematised delirium, of a systematised psychosis of similar content, which persists and evolves independently after the separation of the patients. He finds in the published literature twenty-six cases which in a certain measure seem at first sight to fulfil these conditions, but he maintains that on closer scrutiny it is possible in every instance to discover sources of fallacy which allow the sequence of events to be interpreted otherwise than on the hypothesis of insane contagion. In some cases the patients are members of the same family, and then it is at least conceivable that the occurrence of the systematised delirium is to be attributed to identity of predisposition and similarity of environmental influences, so that instead of contagion we have to do merely with a family psychosis. And it is, of course, notorious that systematised hallucinatory delirium does in fact frequently run in the same stock. In other cases the patients are husband and wife, and we have then to take account of the influences of a common milieu. Weygandt has endeavoured to meet these objections by proposing to consider only those cases in which there is no kinship between the patients, and the second patient is free from all morbid disposition; and he cites an observation published by Riedel (*Vierteljahrsschr. f. gerichtl. Medizin u. öffentl. Sanitätswesen*, 1897, xiv, p. 244) as realising these conditions. Dumas, however, points out that a subsequent and more detailed report of the same case made by Calmus (*Archiv f. Psychiatrie*, 1902) shows that the secondarily affected patient had a strongly marked insane heredity. Turning then to the other criterion of true mental contagion—the persistence and independent evolution of the psychosis after removal from the influence of the exciting patient—Dumas insists on the inadequacy of the evidence as to this point in the published cases. For instance, in the most important observation of this sort, recorded by Arnaud in the *Annales Médico-psychologiques*, the husband developed a systematised delirium

under the influence of his wife, and this delirium continued after his removal to the asylum ; but the clinical history clearly showed that the persistence of the psychosis was due to her frequent visits, after each of which the patient's delusions became more active and pronounced. In other cases, again, where the insanity in the supposedly infected patient has been marked by a tendency to autonomous development, an unbiased examination of the evidence will suggest that moral and physical *surmenage*, due to the work and worry of nursing, has had more to do with causing the mental disorder than any true contagion. It may be noted that insanity in many cases of this latter group is some form of *dementia præcox*, and it would be somewhat difficult to reconcile the current views as to the pathology of that affection with any hypothesis of mental infection.

The conclusion which Dr. Dumas draws for this critical analysis is that no satisfactory clinical evidence has yet been adduced to prove the occurrence of insanity by contagion.

W. C. SULLIVAN.

2. Sociology.

Ethical and Social Science and Human Biology [*Les sciences morales et sociales et la biologie humaine*]. (*Revue Philosophique*, February, 1915.) Grasset.

Professor Grasset's article summarises the arguments which he proposes to develop in two forthcoming works, *La Biologie Humaine*, to be published in the *Bibliothèque de Philosophie Scientifique*, and *Devoirs et Périls Biologiques*, which will be a volume of the *Bibliothèque de Philosophie Contemporaine*.

The author starts by pointing out that the attempt to found ethics and sociology on general biology is bound to lead, and has in fact led, to the negation of moral ideas and of altruism, and to a conception of human life as a struggle of competing egoisms which must ultimately bring about the destruction of society. But no such objections lie when the scientific base of sociology is sought in *human* biology, in a biology, that is to say, which concerns itself with man as an established species, and which, therefore, can and must take account of characteristics which are special to humanity, and lie outside the purview of general biology. Foremost amongst these characteristics are those relating to the mental activities, and these are to be studied subjectively as well as objectively. The usual criticisms urged against the subjective method are only valid when that method is applied outside its proper sphere ; they are irrelevant when introspection is employed in the study of human psychism, where, in fact, there is much more risk of an amcebomorphism than of the anthropomorphism which excites the scorn of the positive biologist.

Human biology, taken in this sense, teaches us that man differs from other animals in the superiority of his psychism, in the capacity which he enjoys through that psychism of accumulating and utilising the discoveries and the mental acquisitions of past generations, and in the distinctive characteristics of his will. Leaving aside the metaphysical aspect of the problem of free will, the biologist can affirm that man's

acts are free, as contrasted with the acts of other animals, in that in human conduct there intervenes the proper and personal activity of the psychic neurones. By reason of these differences we find that biological laws, as they are observed in man, differ in character and in mode of operation from the same laws in the lower animals. Human society is based on the principle of co-operation and solidarity, and that principle is a biological necessity for man. But, like other biological laws, it is not obligatory on man in the way that biological laws are obligatory on animals; man can discuss these laws, question their validity, and violate them. Hence such laws will only govern man if he already possesses the idea of duty and moral obligation, an idea which human biology is unable to account for. How, then, is this difficulty to be got over? Simply by recognising that the idea of moral obligation, whatever be its genesis, has to be accepted as a fact; the existence of the categorical imperative is as much a fact of observation as any of the immediate data of psychology; it is one of the fixed "idea laws" of human conduct, essentially the same in all men and at all epochs, anterior to human biology and of higher authority. It is of the same category as the principle of causality in human reasoning.

But in addition to these "idea-laws" which are fixed and universal, there are others which are variable and do not result directly from intuition, but are products of scientific discovery, and change and advance with the progress of science. We have such a secondary "idea-law" in the law of biological finality in man, the law which asserts that man should preserve, defend, and develop his own being, physical and psychical, and the life of the human species, that is to say, that he should not only develop and transmit his own life, but should also participate in the constant upward movement of progress which is the very law of humanity. The application to this law of biological finality of the fundamental "idea-law" of moral obligation gives us the scientific basis of ethics, and consequently of sociology—it attaches the notion of duty to the observance of the biological laws which ensure the preservation and progress of society and the race. On this basis it is possible to draw out a classification of biological duties and correlative faults, forming the outline of a code of ethics applicable to man in his individual and social activities.

W. C. SULLIVAN.

3. Psychology and Psychopathology.

Interest [L'intérêt]. (Revue Philosophique, December, 1914). Cellérier, L.

The preliminary pages of this paper are devoted to a brief *résumé* of the various doctrines which have been advanced by psychologists as to the essential nature of interest. The writer regards introspection and experimentation as unsuitable methods for the investigation of this subject, and he bases his own conclusions upon observations of the ordinary activities of children. These constitute the most fertile source of study, in so far as interest is here encountered in its most primitive form.

His conclusions are thus summarised. Interest is not a simple fact of consciousness, but complex, and associated with intellectual and emotional elements. The perception or representation of an object

evokes the notion that the object is capable of satisfying an emotional impulse, the immediate result being the maintenance of the attention on the object. Mental life rests almost entirely upon the satisfaction of a great number of affective tendencies, and to attain this satisfaction it becomes necessary to select from our perceptions what can and what cannot procure it. It is interest which controls this selection. Under the influence of unconscious representation, it constantly guides the attention; it appears also, to some extent, as the agent of all our affective impressions, charged by them with carrying out the satisfaction of our needs, and in this way to the maintenance of life.

H. DEVINE.

The Translation of Symptoms into their Mechanisms. (American Journal of Insanity. Vol. XLII, No 2.) Carlisle, Chester.

The writer starts with the assumption that the main trend of everyday life of the adult must centre towards some great wish. When, as a result of actual circumstances, such wishes cannot find expression, a conflict may be produced which may find its solution by a retreat into a psychosis. Such a solution will, of course, especially occur in individuals of a neuropathic type, and all the cases cited reveal an insane or neurotic heredity.

A series of cases is analysed which shows that the psychoses were determined by certain unattainable desires, which prevented the patients from remaining in harmony with their surroundings. The first series belongs to the dementia præcox group, with evidence of progressive deterioration of the personality; the second series belongs to the group of constitutional depressions. In both groups the essential precipitating factor was a conflict arising out of an irremediable situation, and the content of the psychosis itself shows clearly the mechanism of wish-fulfilment.

H. DEVINE.

The following two excerpts are of interest as the estimate, not an inapt one, which our Gallic neighbours and allies have formed of the salient features in the psychology of their Teutonic antagonists.

Psychology of the German Race: Barbarous Pedants. Dr. Bérillon, Professor in the School of Psychology. (Revue de Psychiatrie, February, 1915.)

Since the commencement of the war it has frequently happened that German writers have been astonished at the undisguised antipathy which they arouse in a large number of cultivated minds in all countries. They cannot understand why the sight of "Boches," of whatever rank or degree, is sufficient to inspire such disgust.

Some days ago an editor of the *Hamburger Nachrichten* commented on this fact, so painful to the *amour propre* of the Germans:

"Our people are struggling and sacrificing themselves for the emperor and for the empire. What have we gained in these six months of war, nobly and valiantly carried on? *The hatred and bitter hostility of all!*"

Assuredly the barbarous proceedings practised by the Germans were

not of such a nature as to win for them either esteem or sympathy. The violation of treaties, the invasion of neutral countries, the systematic destruction of ancient monuments, the devastation and pillage of individual houses, incendiarism, assassinations of unarmed civilians, the murder of women and children, the deportation to Germany of inoffensive old people, the rapings, the drunken orgies of officers and generals, there is nothing in all this which might constitute a title to the sympathy of honourable nations.

But, it must be said, German atrocities have only transformed into hatred and a desire for vengeance the disgust which the "Boches" have inspired in all those who have had the misfortune to come in contact with them. I am not speaking merely of the people of Alsace-Lorraine, of the Poles, of the Danes, of all those on whom the weight of German brutality pressed most heavily, but also of those who, in consequence of international reunions, found themselves under the necessity of sojourning amongst the Germans. To their dulness of mind, to their want of taste and tact, there is usually added the conceit which is evolved out of a pedantic erudition. In all ages, as Montaigne has said, pedants have been objects of contempt in the eyes of gallant men. I have never heard a German make a communication at a congress without being reminded of Du Bellay's famous line :

"Mais je hay par sur tout un savoir pédantesque,"

and in this impression certainly the majority of foreigners among the audience participated.

Pedantry, that is to say, affectation in making a parade of knowledge the product of compilation, in expressing the simplest facts with an emphasis, the solemnity of which by no means precludes obscurity, rages nowhere with such intensity as in the German universities.

This fact has been made conspicuous by Heinrich Heine, by Schopenhauer, by Nietzsche, whose evidence is above suspicion because they were Germans. In reproducing what has been written by these authors on German pedantry, we should certainly not fail to interest our readers.

If the brutality of the German derives its origin from ineradicable ancestral proclivities, if it is a characteristic of the race, his pedantry is the result of the kind of education which he styles Kultur. These two tendencies, the first innate, the second acquired, combine to produce the type which the present-day German embodies. They are functions the one of the other.

In the case of the ancient Germans, the Teutons, the Goths, the Vandals, their brutality was fierce, but it was not complicated with pedantry. In the innumerable crimes against the common rights of men the least attentive observer will recognise the joint action of these two factors—innate brutality, associated with a cultivated and organised pedantry.

In fact, if these crimes, by their impulsiveness, destructive propensities, and brutality recall the savage and the cave-dweller; on the other hand, the vulgarity of the acts, the fury given vent to, the depravity, the desire to intimidate, the calculated premeditation, these are the characteristics of the pedant.

When the least of their projects has been thwarted, when any plan

has been frustrated, their fury and their rage for destruction is let loose and knows no bounds. Each check they have encountered at their front has been followed, by way of reprisal, by bombardment of historic monuments, those of Louvain, of Rheims, of Arras, Soissons, Ypres, and of so many other cities.

The German, when his pride is affronted, his vanity wounded, his overweening conceit humiliated, is no longer a man. He loses all at once all sense of shame, all dignity, and all power of self-control.

If, disarmed or wounded, one is at his mercy, he will injure, strike, assassinate. If, on the other hand, he finds himself confronted by an adversary better armed than he is, he debases himself, cringes, begs for mercy :

“Oignez villains, il vous poindra,
Poignez villains, il vous oindra.”¹

The dictum of our fathers exactly applies to the mentality of the contemporary German.

In each of these attitudes the German shows himself vile, low-grade, ridiculous, and grotesque.

One example out of thousands will enable us to judge. At the time of the first occupation of Rheims the venerable Mayor of Rheims, Dr. Langlet, received the Staff-Major in one of the squares. A Saxon general, drunk with fury, with congested face, apoplectic neck, his eyes starting out of their sockets, hurled himself upon him. His arms worked convulsively with disordered movements. His howls, his threats, his abuse, his insults, delivered in the form of savage yells, filled the square. He forgot that he was speaking to an old man of seventy.

All at once a voice behind him exclaims : “What is it all about ? Why all this noise ?”

The brute turns round. Instantly his heels click, his body stiffens, his right hand springs to the level of his helmet ; he stands as if he were petrified, in a hieratic attitude.

What has happened is that he has recognised in his interlocutor a young prince, scarce a score of years old, whose mere aspect has sufficed to transform the savage into an obsequious courtier.

After remaining motionless for some moments he starts swaying his person, head and back, bowing and scraping, and wriggling his ample posterior with the grace of a bear one is teaching to dance.

The witnesses of this scene, in which the odious wretch seemed to vie in making himself an object of ridicule, can never forget the feeling of disgust which his performances excited.

The nature of the grotesque is to be at once abnormal, deformed, and ludicrous. This realisation of the grotesque is experienced on all those occasions when the conventional stiffness of the German automatically exhibits itself—officer before a superior ; assistant in the presence of a professor ; professor before a squireen of princely rank.

The symbol of deformity linked to the ludicrous, and constituting the grotesque, finds expression in the *parade step* ; it has its equivalent in the pointed helmet which adorns the head of a doctor, a pedagogue, or

¹ Save a thief from the gallows, and he will cut your throat ; or, if not oppressed, the churls will become oppressors.

a man of letters. The kalpak of the Death's Head Hussars, on the front of which the two tibias surmounted by a skull recall the labels with which our pharmacists indicate the toxic nature of certain of their products, equally symbolises the combination in the mentality of the German of brutality and pedantry.

It is just because they are *barbarous pedants* that they will never be capable of understanding the legitimacy of the reasons for the aversion and disgust which they inspire.

T. D.

Psychology of the German Wounded. (Revue de Psychothérapie, March-April, 1915.) Dr. Paul Guillon.

There have been many statements made by English observers as to the general behaviour of wounded Germans in British hospitals during the present war. It is, therefore, interesting to read the opinion of a French doctor on the same subject. Dr. Guillon states that he was attached to a Red Cross Hospital which received 1,491 wounded Germans during the two months from September 16th to November 16th, 1914. He says: "I do not know if the Germans are brave in battle, but they are very little so in hospital, moaning upon the application of tincture of iodine to their wounds. When a train of German wounded arrives do not show them your stretchers, as all will want to be carried, even those who can walk; they are excessively effeminate.

"They beg for an anæsthetic for the smallest operation, and they stand chloroform wonderfully well; the truth is that they have had only water to drink.

"I have seen in all its horror the baseness of the German hospital orderlies (infirmiers). Several of them were prisoners. When it was necessary at the beginning for them to pass the night with our cases of tetanus they all tried to escape the task. The only one who spoke French profited by this advantage to declare to me, unknown to his comrades, that he was a father of a family, and that consequently it was the others who should do the work. When we compare the touching spirit of comradeship of our French wounded, who give each other every attention they can, without any trace of social rank, with the behaviour of the Germans, we find a dreadful selfishness in the latter. One has to compel them to do the least thing for each other. They asked me to change their beds because their neighbour had wounds which smelt badly, and when a 'kamarad' groaned all night they asked if he could not be removed quickly 'seeing that he was moribund.' When one had to send a patient to the operating theatre they took the opportunity of emptying his pockets of everything. If a patient died it was necessary to have the body watched to prevent the others from robbing it. Generally speaking, they are bandits; they possess a selfishness and a cynicism which is revolting. One must visit them rarely to prevent disgust."

R. H. S.

4. Asylum Reports.

Report of the Government Asylums for the Insane in Egypt for 1914.

This report brings us up to the end of 1914, and, as usual, Dr. Warnock provides abundant material for the consideration of all interested in the treatment of the insane.

This is the first report since Dr. Warnock has become official head of Egyptian Lunacy, and is now directly under the Ministry of the Interior.

As usual, there is overcrowding in both asylums, and this has been more than hitherto because most of the patients have been admitted at once into asylums instead of being kept in the local hospitals for a time.

In these latter the treatment was not skilled or satisfactory. Very full tables are provided showing the admissions and discharges, and a graphic table is given showing the monthly admissions, the monthly deaths, the highest mean temperature, the seclusions required, and the hypnotics given. This is very interesting, and has been most carefully prepared.

The number of beds in the normal establishment of the two asylums remains 1,550, and there exists an excess of 466 patients. During the year 1,229 cases of insanity were under treatment.

Of the 587 cases discharged, 264 were recovered and 297 were discharged though still insane.

224 deaths occurred, this being 11.3 per cent. on number resident.

The outbreak of war has caused postponement of building development.

In the second part of the report full details as to the cost of provisions are given.

A certain amount of useful work is got from the patients at Abbassia, baskets and mats are made, while at Khanka agriculture is carried on.

Dr. Pearson's death caused a vacancy in Deputy Superintendent, and this has not yet been filled. It is satisfactory to find that some patients were admitted as voluntary boarders. Lectures and classes were held at Abbassia.

We are sorry to find that the criminal lunatics have still to be received at Abbassia.

The return shows the nature of the crime, and the forms of insanity associated with the crime. Pellagrous insanity, to which we shall refer again, caused a large proportion of crimes of violence, such as murders and assaults.

Hashish also was responsible for criminal insanity, but this seems less prevalent than it was.

One cannot, however, say that all the violent cases are due to poisons.

The tables giving the facts of the crime and the insanity are very important, but too long to quote here.

Of the criminal lunatics 21 were discharged "recovered," the average duration of their residence in the asylum being over four years.

Table V gives the forms of insanity of the patients admitted. Of the

700 admitted, 132 were said to be due to pellagra and 92 to hashish. Alcohol only produced 40 cases, general paralysis 41.

Mania was much more common than melancholia, and we presume the toxic causes were responsible for this.

Nearly 6 *per cent.* of the male admissions were suffering from general paralysis, and this disease caused 25 of the 125 deaths. Full tables of the causes of the insanity and of the causes of death are given.

Pellagra and general paralysis provide the largest number of cases. Dysentery and enteritis are also prevalent.

A fair proportion of autopsies were made, but, though a laboratory is ready, the workers at present are wanting for its full use, though a very careful investigation as to the presence of ankylostoma was made, with the result that of 110 patients received 29 proved to be infected. These were treated with thymol.

Paraldehyde was the favourite narcotic.

Mechanical restraint and wet-pack were required, but not frequently.

There were fewer serious accidents than on former occasions. No suicide occurred, and this is certainly remarkable, considering the number of patients, and the inefficiency of many of the native nurses.

The report of Dr. Dudgeon of the asylum at Khanka gives interesting evidence of steady development and of much useful work.

The report is short and concise, giving clearly the items of cost and the facts of the work done.

G. S.

Part IV.—Notes and News.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND.

THE ordinary QUARTERLY MEETING of the Society was held at No. 11, Chandos Street, Cavendish Square, London, W., on Tuesday, May 18th, 1915, Dr. David G. Thomson, President, in the chair.

There were present: Drs. T. S. Adair, H. Baird, H. M. Baker, E. H. Beresford, D. Bower, R. B. Campbell, J. Chambers, R. H. Cole, M. Craig, E. L. Dove, T. Drapes, J. H. Earls, C. F. Fothergill, H. Haynes, F. P. Hughes, G. H. Johnston, J. Merson, A. W. Neill, H. Hayes Newington, H. J. Norman, D. Orr, J. G. Porter Phillips, B. Pierce, W. F. Samuels, Sir G. H. Savage, J. N. Sergeant, W. J. Seward, G. E. Shuttleworth, R. G. Stilwell, R. Percy Smith, T. E. K. Stansfield, R. H. Steen, R. C. Stewart, W. H. Stoddart, J. G. Soutar, D. G. Thomson, W. R. Watson, H. Wolseley-Lewis, and M. A. Collins (Hon. Gen. Sec.).

Present at the Council Meeting: Dr. D. G. Thomson (in the Chair), Drs. T. S. Adair, E. H. Beresford, J. Chambers, R. H. Cole, R. B. Campbell, T. Drapes, Bernard Hart, H. Wolseley-Lewis, A. Miller, H. Hayes Newington, J. Noel Sergeant, T. E. K. Stansfield, J. G. Soutar, R. H. Steen, and M. A. Collins (Secretary).

THE PRESIDENT said the minutes of the last meeting had already been published in the Journal, and he asked whether the meeting would confirm them. (Agreed.) He said the only item arising out of the previous Council meeting which he had to bring before the general meeting was the fact that, owing to various circumstances, the war and its effects, and particularly the fact that the asylum presided over by his successor at Bangour Village, Edinburgh, had been taken over by the War

Office for the reception of wounded soldiers, it was proposed that the annual meeting this year should not be held in Edinburgh, as had been intended, in July next. The Council decided at their meeting to-day that the annual meeting this year should consist of a one-day meeting in London, on Thursday, July 22nd, at which the usual business part of the meeting would be transacted. The Library had received a valuable present of books from Dr. Hyslop, whose letter described them as a first instalment. He did not know whether members would like the titles read out; but there were some hundred volumes; and he was sure it would be the wish of members to accord to Dr. Hyslop their sincere thanks for his handsome contribution of literature.

The vote of thanks was carried by acclamation.

Dr. BOWER asked that the list of books might be printed in the Journal.

The PRESIDENT said he did not doubt the Editors would see to that, if it was the wish of the Association.

OBITUARY.

The PRESIDENT said it was his sorrowful duty to remark upon some sad occurrences which had happened to members of the Association since the last meeting. The premier place among those was occupied by the name of Sir Thomas Clouston. No words of his, even as President of the Association, were needed to tell members of the great personality of Sir Thomas Clouston. He was one of the original founders of this Association many years ago, and, with the exception of Dr. Newington, he (the President) was one of the oldest pupils of Sir Thomas in this room, and any enthusiasm he had for the speciality, to which all in that Association belonged, was originally kindled in his youthful mind in 1876 by the late Sir Thomas Clouston, who had been such a faithful and talented member of this body. He had always retained a sort of hero worship of Sir Thomas ever since he came into contact with him. He had an inspiring personality, and inspired all about him with his tremendous zeal and energy; and he was an example of that rare combination of the great administrator and the great physician which was so much required in this speciality. Of Sir Thomas's works it was not for him, Dr. Thomson, to speak; they were known not only to the members in this special line of work, but to the medical world of all English-speaking countries, and many foreign countries also. His decease had created a great blank, and a feeling that members of the profession had lost a link with the past history of psychiatry in the Association. He was sure it was the sincere wish of members that their sincere feeling of loss be recorded on the minutes of the Association, and that a letter of condolence be sent to the surviving relatives.

The resolution was agreed to by members rising in their places.

The PRESIDENT said that since the last meeting members had also to deplore the loss of Dr. Pierce M. J. Power, who was Assistant Medical Officer at Bicton, near Shrewsbury, before the war broke out. He died for his country on active service.

Another tragedy which had occurred since members last met was the death, by a motor car accident, of Dr. Stuart, Senior Assistant Medical Officer at Chichester. Dr. Kidd, his chief, in writing to the President, said he felt he had almost lost his right hand, especially in the crisis at the asylum, when there were difficulties in connection with its conversion into a military hospital.

Members had also to deplore the grief which had descended on two well-known workers in the Association, namely, Dr. Beveridge Spence and Dr. Seymour Tuke, each of whom had lost fine young promising sons in this terrible war.

Sympathy with the surviving relatives of all those named was duly accorded.

ELECTION OF CANDIDATES FOR MEMBERSHIP.

The PRESIDENT nominated Dr. Stewart and Dr. Norman as scrutineers for the ballot of the following gentlemen:

EVANS, TUDOR BENSON, M.B., Ch.B. Liverpool, Junior Assistant Medical Officer, North Wales Counties Lunatic Asylum, Denbigh.

Proposed by Drs. Robert F. Manifold, W. Stanley Hughes, and Walter H. Smith.

SMITH, CHARLES KELMAN, M.B., Ch.B.Aber., Assistant Medical Officer, Borough Asylum, Portsmouth.

Proposed by Drs. H. Devine, John R. Lord, and M. A. Collins.

They were subsequently declared to have been duly elected.

COMMUNICATIONS.

Dr. THEO B. HYSLOP read a paper on "Anger" (see p. 371).

Sir GEORGE SAVAGE said: GENTLEMEN,—I was pleased when I saw that a paper was to be written which was neither pathological nor clinical, and, as a pastime, I re-perused various authors on mental physiology. I included the volume of our author, Dr. Hyslop, but in the index I failed to find the word "anger." So now I hope to have his latest views. As I expected, the paper gives evidence of thought and research. His references to the ancients, especially to the Egyptians, were very interesting. My earliest reference was to the epigram that "Anger is brief madness," but I think one must recognise that there is normal and even useful anger, as well as morbid and insane rage. It is reported by Darwin as having been exhibited by his infant son at ten months, but Preyer and others noted it in children of only three weeks old, and I should agree with the earlier period as being the more frequent. Sully describes its origin as an unrestrained struggle in the child to get what it wants, in opposition to the wants of others. I look upon it as originating in the instinct of individual conservation. Maudsley writes that anger has its social justification, as it is the physiological basis in the roused energy of the organism reacting against an impression hostile to its self-expansion, and its kindling, in that case, is the self-asserting evidence of vital vigour. Anger has been pointed out as being conservative in the bee, for a stingless bee providing stores of honey would be destroyed by honey seekers with impunity. The expression of anger, also, is protective in lower animals and in man. There are certain physiological expressions of anger, and these have been fully described and analysed. They have been contrasted with those accompanying fear. In anger there is a tendency to move forward, while in fear the inclination is backward. Anger is a peculiar emotive reaction called forth by conscious suffering or injury. Anger is placed among the pleasurable emotions; some consider the pleasure is really due to stimulation of many parts of the body to action. This is partly true, but one must look upon it as a complex emotion in which this aggressive excited state is combined with the feeling of domination. Activity and power unite to give great pleasure. Anger varies in the degree of its development. It is in lower animals little more than a self-protecting reaction, higher it becomes associated with distinct sets of feelings, and on its highest phase it is intellectual and is directed and controlled. The control of the emotions, however, often gives rise to other expressions, and these are most marked in cases of mental disorder. We see nail-biting and tearing out of hair, and skin-picking in cases in which insane anger is present. So much as a short outline of my belief as to ordinary anger. Some, especially Ribot, look upon anger as morbid when it is apparently causeless and when it is persistent. In both these instances it is unreasonable. Besides this, the physical accompaniments of epilepsy and acute mania resemble those of anger, and have been classed with it. I certainly see a great resemblance to anger in the other impulsive mental disorders. In some forms of suicidal and homicidal insanity and in pyromania and other forms of impulsive destructiveness, the signs are similar to those of anger. Maudsley, with his usual force, has written: "In truth things might go badly on earth without revenge, anger and ambition." I fear these rambling remarks have wandered far from Dr. Hyslop's paper, but I must congratulate him on having provided matter of interest and food for thought.

(The President having to leave at this stage, the Chair was occupied by Dr. Newington.)

Dr. SERGEANT said he had been particularly interested in the paper by Dr. Hyslop, in the reference to the anger of God; and it reminded him of the story of two children talking about the story of the Golden Calf. The hearer asked, "What did God do about it?" The answer was, "God was very angry"; and the rejoinder was, "That's just like God; anyone else would have laughed!" God, in His anger, especially as outlined in the Old Testament, seemed a very unworthy Being. The question was really one of proportion; certain things caused anger, and it was desirable to

determine what was the actual cause of anger. A very interesting division of the paper was that which dealt with anger as affecting nations. He remembered very well a story written by one of the young American writers, Wright, entitled *Rules of the Game*. It described a fight between a boy of a lumber camp, from the University, and the "boss" of the camp, the latter having been chosen as "boss" because he was a great fighter. Though the boss was the smaller man, he was winning because of his ferocity, he having first attempted to gouge out the eyes of his opponent, and then to kick him in the groin. Then the boy suddenly "saw red," and it was his fight from that stage. It was the best description of a fight he had seen. The Germans "saw red" at the beginning of the war, but with us it was a slow process; still it was possible we were doing so now.

Dr. W. F. SAMUELS said he had been particularly interested in Dr. Hyslop's remarks about amok, the Malay anger. It might be of interest to members to know that since, eight years ago, amok had been treated as a criminal offence, the attacks of this condition had been much less frequent; and during the last three years there had not been a case of it in the Federated States. Personally, he had not seen a case immediately after an attack had been made; but he had seen many men who had made such attacks when running amok, who had been sentenced, and their sentence subsequently commuted. He had seen them years afterwards, and apparently there was nothing wrong with them. Many of them had been sent to his asylum in the Federated Malay States, for examination and report as to their mental condition. He could not say whether there was anything abnormal to be made out of these cases immediately before or immediately after an attack; but there was no apparent mental abnormality two or three years afterwards. The punishment or the hanging of these men seemed to have exercised a deterrent effect. The meeting might be interested to know that the interpretation given to the prisoner of the long judgment quoted by Dr. Hyslop was: "You are an insect; you are a beast; to-morrow you will be hanged."

The CHAIRMAN said he was sorry he was not a good judge of anger, and he could not contribute anything very useful to the present discussion. One who was good tempered knew very little about anger personally; while an angry man was in a very bad position to judge of what anger was. He could not help admiring Dr. Hyslop's ingenuity in working out this difficult and complicated subject so well as he had. And he had been glad to hear, from Sir George Savage, of the three divisions of anger: the intellectual, the emotional, and the reflex or animal. It seemed to suit what he had been thinking about our enemies and their anger. It was not intellectual anger; it might be emotional, but to his mind, the best description of it was that it was animal or reflex. It was simply their return to the original condition. They were troublesome, ill-natured people long before the time of Cæsar. With great industry they piled on coats of what they called "Kultur," and some people looked upon their progress as the mental parallel of ordinary evolution. But his own view was that they were a people who had clothed themselves with many admirable qualities, but as soon as a real stress came upon them these qualities were stripped off, like the peeling off the coats of an onion, leaving the sheer reflex or animal nature.

Dr. HYSLOP, in reply, said he had never noted the pleasurable nature of the emotion of anger, referred to by Sir George Savage; but he had experienced the after effects, which were extremely painful. In support of his main thesis, he would say that in course of time normal anger would be replaced by arbitration. Morbid anger, on the other hand, would be referred to the physician. He agreed with what Dr. Sergeant said about "seeing red." It was absolutely necessary; and perhaps it was fortunate for this country that there was a good deal of "seeing red" in Britain at the present time. In this war there was a degree of righteous anger such as we knew nothing about in the previous history of our race. He was sorry he was not aware of the short translation of the sentence pronounced on the man who ran amok, because it would have enabled him to avoid inflicting the full speech on his hearers.

Dr. DAVID ORR then read a paper on "Research" (see p. 412).

The CHAIRMAN (Dr. Newington) said the elaborate paper just submitted showed how much research was needed to fit one to pursue research. The author had thoroughly worked out the subject; he imagined there were very few arguments

in favour of the carrying out of research in asylums which had not, in this paper, been brought forward and subjected to careful consideration. In any circumstances the contribution must be of value to the Association now that the speciality was about to embark on research. It was easy to talk of a thing in a general way, but it was not so easy to ensure it. It was to be hoped that those who would pay for the cost of research would be impressed by what Dr. Orr had said; he had made out a most excellent case for it.

Dr. HUBERT J. NORMAN said he knew but little about research, but he desired to convey his thanks, through the Chairman, to Dr. Orr for his excellent paper. Many members, situated as he was himself, got little opportunity for research; and yet in certain aspects of their work they could see the great necessity for it. He sympathised with Dr. Orr in his statement that in many matters which came under the purview of the alienist he was sadly at a loss; because when questioned by the layman as to what was the reason for such and such a condition, he could not say, and the inquirer said his theory was as good as one's own. At present it was not a matter of hypothesis based on pathological investigation, and there was the feeling that it would be a long time before anything could be done. At a time like this one felt despair, because with all the enthusiasm one must have money to carry out this work. As Huxley remarked, "Man cannot live by praise alone; he must have the wherewithal to live." This ghastly war was interfering with many schemes which otherwise would have been helped. At the same time, it was a pleasure to hear such a thoughtful paper, which had taken so much thought. And when the due time arrived, and it was placed before the authorities, it would be a great help in deciding on what lines research should be conducted. He repeated his thanks for the paper.

Dr. HARVEY BAIRD desired to add his thanks for the admirable paper. As Dr. Norman had just said, money was the essential. He was for four years senior assistant at Cardiff Mental Hospital, where there was an excellent laboratory. And the excellence of it was, in the main, due to the superintendent, who had impressed the Borough Committee with the necessity of that work. If every medical superintendent tried to equally impress his own particular committee, there would be much better provision in this respect throughout the country. Already research had told them a great deal; for instance, that syphilis was an important cause of nervous disease. But how often were the public told and warned about this? If arrangements could be made whereby the medical officers of asylums could give public lectures, or even, perhaps, wrote letters to the lay press, greater interest would be shown in the subject, and consequently more would be done for the community in general.

Dr. ORR, in reply, said the matter would be thrashed out by the special Sub-Committee. He did not doubt that the money for the purpose would be forthcoming; but an adequate sum must be asked for; a small grant would be useless.

NORTHERN AND MIDLAND DIVISION.

THE SPRING MEETING of the Northern and Midland Division was held at the kind invitation of Dr. T. Johnstone, at the Swan Hydro, Harrogate, on Thursday, April 22nd, 1915.

Dr. Johnstone presided.

The following twelve members were present: Drs. T. S. Adair, L. D. H. Baugh, Graeme Dickson, S. Edgerley, J. W. Geddes, E. G. Grove, R. W. D. Hewson, C. L. Hopkins, T. Johnstone, H. W. Kershaw, H. J. Mackenzie, S. R. Macphail; and two visitors: Dr. D. Brown and Mrs. Baugh, M.B.

A number of apologies were received from members unable to attend.

(1) The minutes of the last meeting were read and confirmed.

(2) Dr. T. Stewart Adair was re-elected Secretary to the Division.

(3) Drs. A. R. Douglas, J. R. Gilmour, and D. Hunter were elected Representative Members of Council for the next twelve months.

(4) The kind invitations of Dr. T. W. McDowall to hold the Autumn Meeting, 1915, at Morpeth on October 7th, and of Dr. Hamilton Grills to hold the Spring Meeting, 1916, at the County Asylum, Chester, on April 27th, 1916, were cordially accepted.

(5) Dr. Johnstone contributed an interesting paper on "Some Mental Cases in Private Practice." He first gave a sketch of the genesis and development of hydropathic establishments, and showed how the medical and surgical nursing-homes had sprung up and diverted the practice from them. He then gave illustrations of early cases of insanity occurring in the Bible, and pointed out how many of the occurrences narrated in that book could only be rationally explained in that way. He concluded with a record of some curious cases he had met with in general practice.

An interesting discussion followed, to which Dr. Johnstone replied.

(6) Dr. H. J. Mackenzie read Dr. MacPhail's paper on "Pachymeningitis Interna Hæmorrhagica as a cause of Death"—Dr. MacPhail unfortunately being unable to be present. He described the history of a case of acute melancholia in which this was the "prominent lesion," and the "only ascertainable cause of death" supervening on a train of definite clinical symptoms. (This paper appears at p. 443 of present issue).

A hearty vote of thanks was accorded Dr. Johnstone at the close of the meeting for his kind hospitality, and also to himself and Dr. David Brown for a very interesting tour of the Royal Baths, Harrogate, earlier in the day. Dr. Brown made the inspection of the Baths particularly entertaining by his lucid explanations of their characters and uses.

SOUTH-EASTERN DIVISION.

THE Spring Meeting of the South-Eastern Division was held, by the courtesy of Dr. Sergeant, at Newlands House, on Thursday, April 29th, 1915.

Among those present were: Sir George Savage, and Drs. D. Bower, J. Chambers, A. C. Dove, J. H. Earls, F. H. Edwards, H. E. Haynes, W. D. Higson, G. H. Johnston, G. E. Miles, C. McDowall, H. J. Norman, N. Oliver, E. F. Sall, G. E. Shuttleworth, J. Stewart, F. Watson, S. A. K. Wilson, J. C. Woods, and J. N. Sergeant (Hon. Divisional Secretary).

Expressions of regret at inability to be present were received from several members.

The Meeting of the Divisional Committee was held at 1 o'clock.

At half-past one the members were entertained to luncheon, after which they inspected parts of the house.

The General Meeting was held at 3.30 p.m., Dr. Bower in the Chair.

The minutes of the last meeting, having been printed in the Journal, were taken as read and confirmed.

Drs. Edwyn H. Beresford, Hubert J. Norman, T. E. K. Stansfield, Robert H. Steen, and T. Seymour Tuke were elected Representative Members of the Council, and Dr. J. Noel Sergeant Honorary Divisional Secretary for the year 1915-1916. Drs. Hubert J. Norman, W. Rawes, and Robert H. Steen were elected members of the Divisional Committee of Management.

In view of the unsettled state of affairs generally and of many asylums particularly it was decided to arrange provisionally for the Autumn Meeting to be held at 11, Chandos Street, on October 6th, but to instruct the Secretary to arrange for the meeting elsewhere should a suitable invitation be received. It was further decided to postpone the fixing of the place and date of the Spring Meeting.

Dr. SERGEANT then outlined some points of interest in a few recent cases, calling attention to the apparent influence of the war as an exciting cause in a large proportion of these cases, and enlarging on two cases of general paralysis, the one from the medical and therapeutic point of view and the other from the medico-legal aspect.

Dr. BOWER, as chairman, called for discussion, and Sir GEORGE SAVAGE, Major MILES, Dr. HIGSON, Dr. DOVE, Dr. EDWARDS, and Dr. STEWART spoke on various points that had been raised.

Sir GEORGE SAVAGE moved a vote of thanks to Dr. Sergeant, which was carried by acclamation.

At the conclusion of the Meeting the members were entertained to tea.

SOUTH-WESTERN DIVISION.

THE Spring Meeting of the above Division was held by kind permission of Dr. MacBryan, at 17, Belmont, Bath, on Thursday, May 6th, 1915.

The following members were present: Drs. Aveline, MacBryan, Macdonald, Lavers, and J. R. P. Phillips, who acted as Hon. Divisional Secretary in the unavoidable absence of Dr. Blachford.

Dr. Macdonald was voted to the Chair. Dr. Blachford was re-elected Honorary Divisional Secretary and Drs. Lavers and Pope as Representative Members of Council.

Dr. Lavers and Macdonald were elected as Members of the Committee of Management.

The Autumn Meeting was fixed for Friday, October 22nd, 1915, and the Spring Meeting on Friday, April 21st, 1916.

IRISH DIVISION.

THE SPRING MEETING of the Irish Division was held at Hampstead Asylum, by the kind invitation of Drs. Henry and William Eustace, on Thursday, April 15th, 1915.

Members present: Drs. Hetherington, Drapes, Lawless, J. O'C. Donelan, Greene, Mills, Rainsford, W. Eustace, H. Eustace, Redington, Gavin, and Dr. Leeper (Divisional Secretary).

Communications regretting unavoidable absence were read from Dr. Nolan, of Downpatrick, and Dr. O'Mara, of Ennis.

Dr. HENRY EUSTACE, having been moved to the chair, and before the business was proceeded with, said he wished to bring before the meeting the sad loss which the Division had sustained by the untimely demise of one of their most valued members. By Sir John Lentaigne's death they had lost a friend from amongst them whom they all honoured and respected, both in his private and official capacity.

After some discussion it was proposed by Dr. Rainsford, and seconded by Dr. Thos. Adrian Greene: "That the Irish Division of the Medico-Psychological Association, at their first meeting since the lamented death of their fellow member, Sir John Lentaigne, desired to place on record their sense of the loss they, in common with the medical profession in Ireland, have sustained. Sir John Lentaigne always took a very keen interest in the work of the Association, and his presence at their meetings was always both agreeable and instructive. They desire to tender to his family this expression of their most profound sympathy with them in their bereavement."

The resolution was passed unanimously in silence, the members standing in their places.

The minutes of the previous meeting were then read and signed by the Chairman.

A letter was read from Mrs. Hetherington stating that Dr. Hetherington had recovered from his recent severe illness caused by a murderous attack made upon him by an insane patient in his asylum. As Dr. Hetherington was present at the meeting, the members cordially expressed their pleasure at having him again amongst them fully recovered from his unfortunate accident, and congratulated him upon his escape from any ill-consequences from so serious an injury.

Dr. HETHERINGTON thanked the members for their kind congratulations and good wishes conveyed to him during his illness.

The following letter was read by the HON. SECRETARY, who received it from the late Sir John Lentaigne on November 22nd, 1914:

42, Merrion Square, Dublin.

Dear Dr. Leeper,—I beg you will convey to the members of the Irish Division of the Medico-Psychological Association my heartfelt thanks for their kindly sympathy with me and my family on the death of my boy in France.

Yours sincerely,

JOHN LENTAIGNE, M.D.

Dr. R. R. Leeper was unanimously elected Hon. Secretary.

Dr. E. D. O'Neill, Medical Superintendent, Limerick Asylum, and Dr. Nolan, Medical Superintendent, Downpatrick Asylum, were unanimously elected representative members of Council for the ensuing year.

Dr. J. O'C. Donelan and Dr. J. Adrian Greene were nominated as examiners for the certificate in Psychological Medicine of the Association.

The following dates of meetings were fixed:

For the Autumn Meeting, Thursday, November 4th, 1915.

For the Spring Meeting, Thursday, April 6th, 1916.

For Summer Meeting, Thursday, July 6th, 1916.

Dr. Eustace having temporarily vacated, and Dr. Hetherington having been moved to the chair,

Dr. H. M. EUSTACE read his paper on "A Case of Insane Impulses in an Asthmatic Patient" (see p. 446), prefacing his remarks by a few well-chosen words of welcome to the members present, and expressing his gratification at the good attendance, notwithstanding the sad and difficult times through which we were passing.

A lengthy discussion followed in which most of the members joined.

Dr. DRAPES drew attention to the differences of medical opinion as regards the causation of asthma, all were agreed, however, that a strong nervous element entered into its causation. He referred to asthmatic cases which had been cured by hypnotism, and opinion seemed to vary between a purely physical causation (such as vascular turgescence or vaso-motor spasm and high arterial tension) and a purely psychical element. Asthma occurred in his experience more often as a complication of melancholic states than in other forms of mental disturbance. Statistics, however, were not very definite as regards the form of insanity in which it was most frequently found. He mentioned a case under his care where marked gastric crises occurred almost with the regularity of ague, associated with asthmatic seizures. The patient was a woman who was certified as melancholic, with suicidal tendencies, but since her admission in February last, except for very mild depression, hardly noticeable, she had not manifested any overt symptoms of insanity. He surmised that in this case the pneumo-gastric nerve, or its centre of origin in the brain, might be affected. The difficulty in these cases was to determine whether there was any essential or necessary connection between the asthmatic paroxysm and the mental disturbance. In Dr. Eustace's case he was inclined to think there was none.

Dr. RAINSFORD said that he had treated a number of insane patients whose condition was more or less associated with asthma. He considered the case described by Dr. Eustace as of great medico-legal interest, and thought that the existence of a condition of automatism in an inebriate was a subject upon which a lawyer could throw some light. In such a case was the patient conscious of the difference between right and wrong?

Dr. GAVIN said he had recently seen a similar case to that described by Dr. Eustace in which automatic actions were present, and occasional verbal aberration occurred in the course of patient's conversation. His patient suffered from asthma from boyhood, but the asthma had disappeared synchronously with the advent of these symptoms of mental disturbance. He had in his mind the similarity between the automatic actions of his patient (such as suddenly pawing the air and saying he was feeling for cobwebs, and the entire subsequent loss of memory of his performance of these automatic acts), and a condition of "*petit mal*."

Dr. DONELAN had many cases under his care, but comparatively few associated with asthma. He had a case in which epilepsy, asthma, and insanity were all present, and seemed to be alternating conditions.

Dr. GREENE spoke at length upon the medico-legal aspects of Dr. Eustace's case, and mentioned a remarkable case of automatism in an inebriate, who subsequently had no recollection of the many complicated and difficult actions he had been able to perform whilst in the inebriated state. The question of criminal responsibility was one of much vagueness, and judges seemed to hold very divergent views upon the subject.

Dr. HETHERINGTON spoke in similar terms.

Dr. EUSTACE, in replying, said he was gratified by the valuable discussion his paper had evoked. He thought Dr. Greene had struck the point, as Moses struck

the rock, when he said that the question of criminal responsibility was one fitted for the elucidation of lawyers, as their ideas seemed very vague upon this interesting subject.

The following Resolution, which was passed at the February meeting of the Educational Committee, was read by the Secretary:

" EDUCATIONAL COMMITTEE.

"It is resolved that no candidate be excused the nursing examinations or any part of them on any ground whatsoever.

"It is resolved that those male and female nurses who have served during the present war in either the Navy or Army be excused all the items of training mentioned in paragraph 8 of the training regulations except (a) requiring twelve months' attendance on the insane.

"It is resolved that in the case of any attendant or nurse, who, by reason of war service, has been prevented from sitting for the preliminary examination, the statutory interval between the two examinations be not insisted upon, provided that the necessary three years' service be not shortened."

It was felt that the resolution of the Irish Division has been somewhat drastically dealt with by the Educational Committee, but it was agreed that no further action should be taken in the matter.

The discussion which took place at the Autumn Meeting last year having proved such a success, it was suggested by Dr. Rainsford that another similar discussion be introduced at the meeting in November next. Dr. J. O'C. Donelan kindly consented to open a discussion on the subject of "Alcoholism and Insanity," and his proposal was cordially agreed to.

It was proposed by Dr. GREENE and passed with acclamation that the best thanks of the Division be tendered to the Doctors Eustace for their kindness and hospitality in entertaining the meeting.

Dr. EUSTACE having replied, the proceedings terminated.

RESEARCH COMMITTEE.

Minutes of Meeting held in London on February 18th, 1915.

Present: Dr. Percy Smith (Chairman), Drs. Adair, Chambers, Collins, Newington, Rows, and Thomson.

(1) Dr. Collins proposed that Dr. Percy Smith be elected Chairman of the Committee. This was seconded by Dr. Adair and carried unanimously.

(2) Dr. R. G. Rows was appointed Honorary Secretary of the Committee.

(3) Dr. Hayes Newington and Dr. D. Orr were co-opted members of the Committee.

(4) Letters from Dr. T. W. McDowall to Dr. Collins and the Board of Control were read and considered. After some discussion Dr. Collins moved the following resolution: "That the Research Committee approve the principle contained in the letters of Dr. McDowall, and ask the Council to direct the Parliamentary Committee to further legislation, when such is possible, to allow of conjoined expenditure on Research by local authorities governing public Asylums." This was seconded by Dr. Thomson and adopted.

(5) Dr. Collins proposed "That the Meetings of the Research Committee be held, as far as possible, at the time of the ordinary Meetings of the Association." This was seconded by Dr. Adair and adopted.

(6) Dr. Collins proposed "That the Research Committee ask the Council whether it would be willing to make grants in aid of original work on the recommendation of this Committee." This was seconded by Dr. Chambers and adopted.

(7) It was decided to hold the next Meeting of the Committee on Tuesday, May 18th.

List of Committee: Dr. T. Stewart Adair, Dr. J. Shaw Bolton, Dr. J. Chambers, Dr. M. A. Collins, Dr. H. Devine, Dr. T. Drapes, Dr. E. Goodall, Dr. J. R. Lord, Dr. Hayes Newington, Dr. D. Orr, Dr. W. Ford Robertson, Dr. R. G. Rows (Hon. Secretary), Dr. Percy Smith, Dr. D. G. Thomson, Dr. Tulloch,

ASYLUM WORKERS' ASSOCIATION.

By the kind permission of the Editor of *The Asylum News*, we publish the following extract from Sir James Crichton Browne's address when seconding the adoption of the report at the annual meeting of the Asylum Workers' Association held in London on May 19th, under the presidency of Sir John Jardine :

As an asylum worker of nearly fifty years' duration—and an asylum worker still—I almost think I am entitled to a gold medal—and as a former President of the Association I have pleasure in seconding the adoption of the annual report, which has been so clearly and felicitously recommended to your favourable consideration by Sir John Jardine. The report, like all such documents at this time, has its sombre side. It records the steady progress of the Association in raising the status of asylum nurses and attendants, in affording assistance to those of them who require it in ill-health, in giving recognition to those of them who have rendered long and meritorious service, and in drawing them all together in good fellowship and mutual helpfulness, but it notes also gaps in the ranks of the Association left by those who have gone to take their place in other ranks, and some of whom have fallen in these ranks heroically, giving their lives for their beloved country. The asylum service, as a whole, has nobly responded to the call for human munitions of war. Medical officers, matrons, nurses, and attendants, have eagerly flocked to the Colours, and I think it is of vital importance that their interests should be jealously safeguarded while they are away. I think you will see the advantages of this Association, in the steps taken by it and described in the report, to protect the position of asylum officers on active service in relation to the Superannuation Act, 1909. I question whether, without the intervention of its Central Executive Committee, such a prompt and satisfactory response would have been obtained to the claim urged that the time spent by asylum officers on military service shall be regarded as time spent in the service of the asylum in respect of pensions. In one way or another, by adding years, or granting leave, that will now certainly be done, and it would be intolerable that anything else should be done, or that that should be left undone.

But while the interests of asylum officers on active military service are attended to, something should be said about those who remain on service at home. They have been left short-handed, they have had double duty thrown upon them, they have had to work overtime, they have had a most anxious and wearing experience, throughout which they have willingly done all that has been required of them, and they find, at least the married men among them, that their wages have been practically reduced, for the purchasing power of a sovereign is not now what it was twelve months ago. (Hear, hear.) That is a matter deserving of consideration, and it appears to me only equitable that married attendants should have a certain percentage of increase of wages during the continuance of the war at any rate.

ARE ASYLUMS A COSTLY MISTAKE?

The conversion of asylums containing 17,000 beds into hospital accommodation for the wounded has entailed a heavy burden on all concerned in lunacy administration, a burden, however, which has been cheerfully borne. I noticed the other day that an ex-official of the London County Council—that body which, of all bodies in this country, has the heaviest lunacy responsibilities, has been hinting that our asylums are, after all, a costly mistake, because by means of medical and surgical skill, they keep alive, at the expense of the ratepayers, numbers of patients beyond the ordinary limit of human life. The logical outcome of Sir Laurence Gomme's complaint, if it is valid, would be the addition to every asylum of a lethal chamber with a crematorium attached, into which all lunatics who have reached the stage of chronicity should be introduced, a proceeding which, it seems to me, would be analogous to killing the wounded after battle. (Hear, hear.) The chronic insane are those who have been seriously worsted and crippled in the battle of life, who have passed through great tribulation and are deserving of our tenderest sympathies. They are not insensate logs, as is sometimes thought, but human beings still, with many of our human feelings, although hidden and obscured, and medical and surgical science cannot be more nobly employed than

in alleviating their sufferings and in prolonging their lives, for where there is life there is hope, and all of you have seen patients who have been labelled chronic, but who, like the dry bones in the valley, have been breathed upon and restored to health and usefulness. As a consequence of that arid materialistic philosophy which has too long been in the ascendant, there has been among the public, at any rate, some falling away from the comprehensive philanthropy of the days of Lord Shaftesbury, out of which our lunacy system, of which we have good reason to be proud, has grown up. It has been recommended by a Royal Commission that the married insane, after three years of insanity, should be liable to divorce, and now it is suggested that when in cases of chronic insanity hopes of recovery are practically at an end, the ratepayers should be relieved of the cost of their maintenance, by euthanasia. I am confident that such suggestions will have no countenance from you, who have ministered to the insane, who know what they are, who are full of pity for them, who devotedly do your duty to them notwithstanding the distressing and harassing traits which many of them present, and who, in some instances, have learnt to love them.

THE AFTERMATH OF WAR.

Asylum workers should, to my thinking, all be idealists. They should have something to look to, beyond the dull routine, the trying and sometimes repulsive task of the hour, something to sustain them in their anxious and laborious undertaking. And their idealism will, I believe, be stimulated vastly by the work which now lies before them, for it will be theirs to soothe and solace many of those who have been struck down in this terrible conflict in which we are engaged. Much of the aftermath of war will find its way into asylums. There have been a large number of cases of cranial injuries, especially in the trenches, and some of these will inevitably result in mental impairment. There have been in every phase of the war an enormous number of cases of nervous shock and overstrain which will bear fruit in neurasthenia and psychical disorders. There have been, thanks largely to the interference of the criminal cranks in dissuading men from anti-typhoid inoculation, a certain number of cases of that disease which occasionally leaves mental exhaustion behind it. There has been throughout the country immeasurable anxiety and sorrow and bereavement, and these will undoubtedly in many instances deepen into morbid melancholy. You will assuredly have to do your bit not only now, but when the war is over, and, animated as you all are by patriotic fervour, strung as you all are to everlasting hatred of German barbarities, you will, I am sure, in the spirit of the enthusiast and not of the hireling, do your best to succour those who have succoured their country in its hour of need.

MENTAL TREATMENT BILL.

(Presented by Mr. Cecil Harmsworth. Ordered to be printed April 20th, 1915.)

MEMORANDUM.

As the law now stands nursing homes cannot receive for treatment patients who are suffering from nervous breakdown affecting their mental condition (Lunacy Act, 1890, Section 315 (2)). Such patients can only obtain residential treatment if they are certified insane and sent to an asylum or hospital under the Lunacy Acts. This applies even if the breakdown is of a temporary character and almost certainly capable of being cured. As it is found that a sort of stigma attaches throughout life to a person who has once been certified as insane, there is great reluctance to have such cases certified, and the result is that persons suffering from temporary mental disorder do not receive the special treatment in a nursing home which is suitable to their condition and which is calculated to effect a speedy cure.

The object of the present Bill is to secure the proper treatment of such cases by making the law less rigid than at present. It removes the necessity for formal certification in the case of persons suffering from mental breakdown of recent origin and arising from wounds, shock, etc. In this respect it assimilates the English law to the law which has been in force in Scotland for fifty years and which has worked satisfactorily [Lunacy (Scotland) Act, 1866, Section 13].

It is brought forward at the present moment in order to meet an urgent need which has arisen in the case of soldiers and sailors invalided from the front, and others whose health has broken down under the stress engendered by the war.

This Bill will enable a man who in the service of his country has suffered a nervous breakdown to accept the treatment without being certified, but only for a period not exceeding six months and under conditions which will provide security against misuse.

A BILL TO FACILITATE THE EARLY TREATMENT OF MENTAL DISORDER OF RECENT ORIGIN ARISING FROM WOUNDS, SHOCK, AND OTHER CAUSES.

Be it enacted by the King's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same as follows:

1.—(1) Notwithstanding the provisions in any other Act to the contrary, a person shall not be liable to any penalty for receiving to board or lodge or for taking charge of, whether for payment or not, any person suffering from mental disorder of recent origin arising from wounds, shock, disease, stress, exhaustion or any other cause, if and so long as he complies with the conditions imposed by regulations made under this Act.

(2) Regulations may be made in England by the Secretary of State with the concurrence of the Lord Chancellor, and in Ireland by the Lord Chancellor of Ireland, as to—

- (a) the period, not exceeding six months, for which such a person may be so received;
- (b) the institutions, homes or houses into which such a person may be received;
- (c) the statements and notices to be furnished as respects a person so received;
- (d) the treatment of persons so received and their visitation, removal to other care, and discharge.

(3) Regulations made under this Act shall be laid before each House of Parliament as soon as may be after they are made, and if an address is presented to His Majesty by either House of Parliament within the next subsequent twenty-one days on which the House has sat praying that any such regulations may be annulled, His Majesty in Council may annul the regulations, and they shall be thenceforth void, but without prejudice to anything previously done thereunder before the expiration of the said period, and the regulations made under this Act shall have effect as if enacted in this Act.

2.—(1) This Act may be cited as the Mental Treatment Act, 1915.

(2) This Act shall not extend to Scotland.

(3) This Act shall continue in force during the continuance of the present war and for a period of six months thereafter and no longer, except that, as respects persons who at the end of the said period of six months are receiving treatment under this Act, it shall continue in force so long as they continue to receive such treatment.

VOLUNTARY MENTAL TREATMENT BILL.

(Presented by The Earl Russell. Ordered to be printed July 22nd, 1914.)

MEMORANDUM.

This Bill is intended to secure that persons whose mental condition is uncertain, but require medical treatment to prevent their becoming lunatics, may receive such treatment in a manner which is at present impracticable, owing to the present state of the law.

The existing law assumes that a given person is or is not insane, and takes no notice of early symptoms of insanity. These symptoms are curable by early treatment, but, although medical treatment of a person who is not insane may be given without fear of penalty, any person who keeps such a patient is liable to be prosecuted under section 315 of the Lunacy Act, 1890, on the ground that the

patient is in fact insane. This risk attaching to early treatment without a certificate of insanity is so great that it is almost impossible to secure adequate medical treatment for such patients, nor can they be kept under observation, and consequently they are left to become lunatics in fact, or, in order to avoid that consequence, it must be assumed already to have taken place. Thus, in order to prevent patients becoming confirmed lunatics by neglect, there is a strong tendency to certify all doubtful cases as insane. Of these the great majority very quickly regain their mental equilibrium and are sent out again perfectly sane, but with the stigma of insanity upon them and having been subjected to deprivation of liberty and rights. This inflicts exceptional hardship upon persons with families, and such classes of persons as clerks and teachers and governesses whose chance of earning a livelihood is practically destroyed by having been certified as insane.

The Bill is intended to remedy this defect. By giving permission to treat such patients while making adequate provision against abuse, and providing that they can only be detained while they are willing, the law will be restated so that mental disorder of a kind which merely demands observation and treatment will be kept distinct from insanity, with which it is at present confused merely by reason of fear of prosecution, and not by reason of any express provision of the Lunacy Acts. The section in question was inserted for the protection of the public; its application tends to harm the public. This Bill is intended to make it clear that to treat and observe persons whose mental condition is in doubt does not render those who are responsible for their treatment liable to penalties intended to protect the interests of lunatics and not to harm those who are not yet but may become insane.

The rest of the Bill is machinery for effectively carrying out the main object.

A BILL INTITULED AN ACT TO AMEND THE LUNACY ACTS, 1890 TO 1908, AND TO ENABLE MEDICAL TREATMENT TO BE GIVEN TO PERSONS, IN THE EARLY STAGES OF MENTAL DISEASE WITH THEIR OWN CONSENT.

Be it enacted by the King's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:

1.—(1) It shall be lawful for an approved person named in an authority for mental treatment to receive a patient suffering from incipient mental disease into an approved house named therein for a period not exceeding six months from the date thereof.

(2) An authority for mental treatment shall be in the form set out in the Schedule hereto, and shall be signed by a registered medical practitioner, provided that he is not—

- (a) the person who is to have charge of the patient;
- (b) a person interested in the payments on account of the patient;
- (c) in the case of an institution for lunatics or general hospital the manager or any member of the staff, or a member of the visiting or managing committee, or a medical practitioner regularly attending or visiting for payment any patient or patients at the asylum or hospital;
- (d) the husband or wife, father or father-in-law, mother or mother-in-law, son or son-in-law, daughter or daughter-in-law, brother or brother-in-law, or sister or sister-in-law of the patient; or
- (e) the partner or assistant of any of the foregoing persons.

(3) No authority for mental treatment shall, without the consent of the board of control, be given within six months after the expiration of a previous authority for mental treatment in respect of the same patient.

(4) During the period named in the authority for mental treatment section three hundred and fifteen of the Lunacy Act, 1890, shall not apply.

(5) No person received under an authority for mental treatment shall be detained against his will.

2.—(1) Within one clear day after receiving a patient under an authority for mental treatment the person who receives him shall give notice of such reception to the board of control in the form set out in the Schedule to this Act, and shall also send to the board of control a true copy of the said authority.

(2) Within one clear day after the death of a patient while in his care under

an authority for mental treatment, the person who shall have care of such patient shall give notice of the death to the board of control.

(3) Within one clear day after every change of address the person who has care of a patient under an authority for mental treatment shall give notice of such change of address to the board of control.

(4) Within one clear day after the expiration of an authority for mental treatment the person who shall have had care of the patient shall send a report to the board of control in a form to be prescribed, and giving such particulars as shall be required by the said board of control.

3. It shall be lawful for the board of control to permit an authority for mental treatment to be altered by a registered medical practitioner by substituting for the approved person and approved house named therein or one of them some other named approved person and approved house.

4.—(1) Save as hereinafter provided no person shall at the same time undertake the care of more than one patient under an authority for mental treatment without the previous sanction in writing of the board of control.

(2) The manager of an institution for lunatics may receive and lodge any number of patients under authorities for mental treatment, provided that, in the case of a lunatic asylum provided by a local authority, the visiting or managing committee shall have previously by resolution duly passed authorised him to do so, upon such terms and under such conditions as they may think fit.

(3) The powers of a local authority under the Lunacy Act, 1890, shall include the providing and maintaining an institution for the reception and boarding of patients under subsection (2) of this section.

(4) The board of control may authorise a general hospital to receive patients under authorities for mental treatment on such terms and under such conditions as the board of control shall determine.

(5) No person undergoing treatment in accordance with the provisions of this Act shall be removed from England without the previous consent of the board of control.

(6) The powers of making rules and visiting and removal given to the board of control by the Lunacy Act, 1890, as amended by sections twenty-two and sixty-five of the Mental Deficiency Act, 1913, shall extend to patients under authorities for mental treatment given under this Act.

(7) The provisions of Part XI of the Lunacy Act, 1890 (except sections three hundred and fifteen and three hundred and thirty-three), shall apply to this Act and be construed accordingly.

5.—The provisions of section three hundred and thirty-eight of the Lunacy Act, 1890, shall apply to this Act and be construed accordingly.

6.—The terms used in this Act shall have the same meaning as in the Lunacy Act, 1890, and in addition thereto in this Act, if not inconsistent with the context:

- (a) "Approved house" means any house which has been approved by the board of control as fit to be used for the reception of patients suffering from incipient mental disease, and is occupied by an approved person;
- (b) "Approved person" means any male or female person who has been approved by the board of control as fit to have the care and treatment of patients suffering from incipient mental disease;
- (c) "Authority for mental treatment" means a written statement signed by a registered medical practitioner that a patient named therein is suffering from incipient mental disease, and that it is expedient with a view to his recovery that he be under the care of an approved house named therein and stated;
- (d) "Incipient mental disease" means mental disease of recent origin which is not sufficient to necessitate compulsory detention either as a certified lunatic or as a defective within the meaning of the Mental Deficiency Act, 1913;
- (e) "Month" means calendar month.

7.—(1) This Act may be cited as the Voluntary Mental Treatment Act, 1914, and shall be construed as one with the Lunacy Act, 1890, and amending Acts; and this Act and the Lunacy Act, 1890, and amending Acts, may be cited together as the Lunacy Acts, 1890 to 1914.

(2) This Act shall not extend to Scotland or Ireland.

(3) This Act shall come into operation on the first day of January one thousand nine hundred and fifteen.

SCHEDULE.

FORM 1.

AUTHORITY FOR MENTAL TREATMENT.

I, the undersigned, _____, a person registered under the Medical Act, 1859, and in the actual practice of the medical profession, declare that I have carefully examined _____, a (state whether male or female) _____ person now residing at _____, and that I am of opinion that the said _____ is suffering from *incipient mental disease*, but is not certifiable under the Lunacy Acts, and that it is expedient with a view to his recovery that he be placed under the care of (1) _____ at _____ for a period not exceeding six months.

(Signed)

Full postal address

Qualification

Dated

¹ The patient may be under the care of—

- (1) An approved person in an approved house ;
- (2) The manager of an institution for lunatics ;
- (3) The manager of a hospital under section four, subsections (3) and (4).
See sections one, four, and ten.

FORM 2.

FORM OF STATEMENT TO ACCOMPANY FORM 1.

(If any particulars in this statement be not known, the fact to be so stated).

Name of patient with Christian names at length

Age

Sex

Civil state

Occupation

When and where previously under care and treatment

State asylum institution, or approved house

Whether dangerous to self or others

Relationship to person signing

I certify that to the best of my knowledge the above particulars are correctly stated.

(Signed)

Name in full.

Full postal address

The patient may fill up and sign this form if no other suitable person is available.

FORM 3.

FORM OF NOTICE OF RECEPTION.

To be forwarded to the board of control by the approved person within one clear day.

I hereby certify that _____, aged _____, was admitted into _____ on the _____ day of _____, 191____, under an authority signed by _____ of _____ (1), a registered medical practitioner of, and at the request of _____

of
and
of

for treatment under the Mental Treatment Act, 1914.

I herewith send a true copy of the above-mentioned authority.

(Signed)

Medical officer of asylum or hospital, or an
approved person.

Dated this day of , 191 .

(¹) NOTE.—If at the request of the patient himself it must be so stated.

To the board of control.

ASSISTANT ASYLUM MEDICAL OFFICERS.

From the Annual Report of the Council of the British Medical Association, published in the Supplement to the *British Medical Journal*, May 8th, 1915:

The Council reported in its Annual Report last year that in co-operation with the newly-formed Association of Assistant Asylum Medical Officers of England and Wales a standing Sub-Committee containing representatives of the latter Association had been set up to consider all questions affecting the interests of this class of practitioners. During the present session attention has been given by this Sub-Committee to the question of the pay and conditions of work of assistant asylum medical officers, and the appended memorandum has been drawn up. It has received the approval of the Assistant Asylum Medical Officers' Association, and is now submitted to the divisions and representative body as embodying the considered opinion of those chiefly concerned.

SPECIAL REPORT OF COUNCIL ON THE CONDITIONS OF EMPLOYMENT AND REMUNERATION OF ASSISTANT ASYLUM MEDICAL OFFICERS.

(1) The Council has had certain statistics placed before it by the representatives of the Assistant Asylum Medical Officers' Association which clearly demonstrate the unsatisfactory conditions of pay and prospects of the service. The commencing salaries of first assistant officers begin as low as £150 per annum, and for second assistants as low as £120 per annum. The average salary for first assistants is about £325, and for second assistants £225. To these salaries must be added certain emoluments, the cash value of which may be averaged at about £100 per annum. The inadequacy of pay and prospects is felt more particularly by officers who have spent some years in the service, for it appears that after five to ten years' service the average salaries, including emoluments, amount only to £350, and after ten years' service £425, with exceedingly little chance in the majority of cases of any further promotion. It thus appears that to many officers the service is in the nature of a "blind-alley."

(2) It may be said that the best remedy would be for those who are dissatisfied to leave the service, but it must be remembered that there is hardly any other branch of medical activity which so unfits a practitioner for any other work, so that after a few years in the service it becomes exceedingly difficult for an officer to make a fresh start. Recently the operations of the law of supply and demand have raised the salaries of those entering the service, and have thus led to the anomalous position that many juniors who have entered at the increased rates are getting better pay than a number of their seniors. The law of supply and demand cannot, however, be reckoned on to improve the conditions of the older officers who are, generally speaking, quite unable to make the only effective protest open to them, namely, to threaten to resign.

(3) But in the case of the senior officers there is another grievance which is felt quite as much as the financial one. Many of them have no prospect of being able to marry, either because the rules of the asylum specifically debar them from marriage, or because there is no separate house accommodation. Statistics show that out of 167 officers, 146 are unmarried, and most of these are over thirty years of age. This is neither good for the individual nor for the State, and where this

has been realised by the asylum authorities, and the assistant officers have been allowed to marry, and have been provided with a house outside the institution, it has only been granted as a favour and is not established as a right. The Assistant Asylum Officers' Association has represented to the Council that it is time that a certain proportion, at any rate, of the seniors of the assistant officers were provided with separate house accommodation as a matter of course, and not as a special privilege. With this proposition the Council is in cordial agreement, and it therefore makes the following recommendations. The discussion of the recommendations will, it is hoped, evoke among members of the Association generally a feeling of sympathy with a branch of the profession which up to the present has been to a large extent isolated from the general body of the profession.

RECOMMENDATIONS.

Salaries and Emoluments.

(a) That the minimum commencing salary of assistant asylum medical officers be £220, rising after one year of probation to £250, and then by £25 per annum to £350 per annum, irrespective of promotion, and that the salaries of officers who are not promoted should then rise automatically by £10 per annum for ten years.

(b) That in addition to the operation of the above scale, an officer on being promoted to second assistant should receive an additional £50 per annum, and on being promoted to senior assistant an additional £50 per annum.

(c) That assistant asylum medical officers who have received promotion shall also participate in the automatic increase of £10 per annum for ten years, which commences after five years' service.

(d) That emoluments should be valued at least at £100 per annum, and made commutable for full value at the end of five years.

House Accommodation.

(e) That every asylum should contain a separate house suitable for a married assistant officer, and that where an asylum contains four or more assistants two such houses for assistant officers should be provided.

The Council, by a resolution, approved of the above recommendations.

QUESTIONS ASKED BY MR. GOODRICH AT THE MEETING OF THE LONDON COUNTY COUNCIL ON MAY 11TH, 1915.

(1) Has the Chairman of the Asylums and Mental Deficiency Committee seen an article in the *Daily Express* of April 24th, 1915, by Sir Laurence Gomme on "The Chaos in the Government of London," in which he refers to some services of the Council remaining "untouched by outside thought," and goes on to say "we are left, for instance, with the management of lunatics, which goes on without changes in its objective or much care for its results, and the ratepayer is still supporting patients who are kept alive solely by medical and nursing skill far beyond the age of ordinary lives"?

(2) Is it a correct statement that lunacy administration in London has "gone on without changes in its objective or much care for its results"?

(3) Is it a fact that patients in the London asylums are kept alive "far beyond the age of ordinary lives"?

ANSWERS.

(1) The answer to the first question is in the affirmative. I think that the Council will regret that Sir Laurence Gomme should have made a sweeping general statement of this kind without, I fear, any investigation. I am informed that the late Clerk of the Council paid one visit only to a London Asylum, and that was to inspect some Saxon remains which had been discovered in the grounds.

(2) Those who are intimately acquainted with the work of the Asylums Committee will know that the statement that lunacy administration in London has "gone on without change in its objective or much care for its results" is directly contrary to the facts. The appointment of a pathologist to investigate the causes of insanity, and the provision of the Maudsley Hospital, to which Dr. Maudsley has so generously contributed £30,000, are facts alone which prove the contrary.

(3) I am not able to say without investigation whether patients in the London Asylums are kept alive "far beyond the age of ordinary lives," but there is little doubt that many of these unfortunate people do live much longer in the asylum with the care and attention they receive than would be the case if they had not these advantages. My Committee, I think, are pleased to know that this is the case, and the alternative is a policy which they do not favour, and which, I think, would be abhorrent to the community.

BOOKS PRESENTED TO THE MEDICO-PSYCHOLOGICAL ASSOCIATION BY DR. HYSLOP.

- Report of Royal Commission on Care of Feeble-Minded* (1908), 8 vols.
L.C.C. Asylums Report, 1 vol.
Parliamentary Reports re Mental Deficiency Bill, 23 vols.
Mental Deficiency Bill, 1 vol.
Wiedersheim: *Comparative Anatomy of Vertebrates*, 1 vol.
Ladd: *Philosophy of Mind*, 1 vol.
Bastian: *The Brain as an Organ of Mind*, 1 vol.
Reid: *Powers of the Human Mind*, 2 vols. *An Inquiry into the Human Mind*, 1 vol.
Beers: *A Mind that found Itself*, 1 vol.
Conolly: *Indications of Insanity*, 1 vol.
Wundt: *Human and Animal Psychology*, 1 vol.
Abercrombie: *Diseases of the Brain*, 1 vol.
Hertwig: *Lehrbuch der Entwicklungs-Geschichte*, 1 vol.
Tuke: *Sleepwalking and Hypnotism*, 1 vol.
Calderwood: *The Relationships of Mind and Brain*, 1 vol.
Tucker: *The Asylums of the World*, 5 vols.
Mercier: *Lunatic Asylums*, 1 vol.
Kirchhoff: *Handbook of Insanity*, 1 vol.
Binet: *Les Alterations de Personnalité*, 1 vol.
Beaunis: *Les Sensations Internes*, 1 vol.
Delage: *L'hérédité*, 1 vol.
Radcliffe: *Epileptic and other Convulsive Affections of the Nervous System*, 1 vol.
Chapin: *Compendium of Insanity*, 1 vol.
Wood: *Plea of Insanity*, 1 vol.
Payne: *Elements of Mental and Moral Science*, 1 vol.
Mercier: *Sanity and Insanity*, 1 vol.
Abercrombie: *Intellectual Philosophy*, 1 vol.
Quain's *Anatomy*, vol. iii, pt. 1, 1 vol.
Morrison: *Crime and its Causes*, 1 vol.
Solly: *The Brain*, 1 vol.
Veitch: *Dualism and Monism*, 1 vol.
Janet: *Les Névroses*, 1 vol.
Winslow: *Obscure Diseases of the Brain and Mind*, 1 vol.
Locke: *Essay on the Human Understanding*, 1 vol.
Prichard: *Treatise on Insanity*, 1 vol.
Spurzheim: *Philosophic Principles of Phrenology*, 1 vol.
Bucknill: *On Asylums in America*, 1 vol.
Lincoln: *Sanity of Mind*, 1 vol.
Kraepelin: *Psychiatrie*, 1 vol.
Tuke: *Insanity and its Prevention*, 1 vol.
Ryland: *Student's Handbook of Psychology and Ethics*, 1 vol.
Granger: *Psychology*, 1 vol.
Journal of Mental Science, about 20 vols.

EXAMINATION FOR NURSING CERTIFICATE.

List of Successful Candidates.

FINAL EXAMINATION, MAY, 1915.

- Chester, Upton.*—Mabel Lloyd, Joseph Hinds.
Essex, Brentwood.—Rose Hunt.
Essex, Severalls.—Dora Mildred Debenham, Daisy Florence Ballard, Annie Beatrice Buckle, Kate Stanford Smith, Florence Wainwright, Emma Ada Watson.
Glamorgan, Bridgend.—James Humphries Davies, Agnes Creggan, Lily Isabella Chandler, Jenny Francis, Roderick Lewis Davies, Walter William Jarrett.
Isle of Wight.—Beatrice Clark, Sidney Arthur Gayler.
Kent, Barming Heath.—Gertrude Hurford, Margaret Anastasia Curran Smith, Cecil Ernest Butter.
Kent, Chartham.—Henry Cary Williams.
Lancaster County.—Ethel May Green (with distinction), Margaret Wood, Helen Holmes, Mary Beattie, Mollie Walker, Mary Carter.
Bexley.—Annie Sanderson Allan, Florence Anglis, Agnes Thompson, Nellie Hannah Pick, Lillian Whitehurst.
Cane Hill.—Sybil Amelia Sloggett, Elsie Caroline Last (with distinction), May Isabella Seales, Nicholas Watson, Louise Ruth Potter, Michael Joseph Murphy.
Banstead.—Alfred John Fluck, Edith Downs, Caroline Hetty Brenton, Mary Annie Bourke, Clara Wright.
Long Grove.—Frederick Thomas Pearce, Mary Ann Isobel Laing, Eliza Price, Mary Scott, George James Wylie.
Manor.—Jessie Rosa Watkinson, Clarissa White.
Hanwell.—Sarah Clements, Ellen Mabel Anscumb, Brigid M. O'Reilly, Daisy E. Marke, Lily Kerrins, Winifred Amelia Hyatt.
Claybury.—Margaret E. Jones, Lily Dora Smith, Kathleen Vincent, Alice Lilian Panther.
Colney Hatch.—Florence Emma Parish, Annie Bamberger, Elizabeth Harriet Goddard, Ethel Mary Simmons, Emmy Susannah Cook.
Napsbury.—Nancy Pearce Vickers, Alice Emma Rickett, Arthur Montagu Hall, Kathleen Margaret Connelly.
Abergavenny.—Frances O'Brien, Romley Wilson Thomas, Mary Jane Dargavel, Alice May Weeks.
Norfolk.—Frances McGill, Rosetta May Jermy, Lillian Mattocks, Rose Lily Wann, Edith Emily Ewen, Amy Adelaide E. Samways.
Notts County.—Lucy D. Skermer, Kate Balderson Howes.
Shropshire.—Annie Philamina Bailey, Ethel May Jarvis, Gladys Helen Minshall.
Staffs, Chedleton.—Bertha Portsmouth.
Suffolk.—Emerie Harry Stearn.
Surrey, Brookwood.—Annie Louisa Jenkins (with distinction), Annie Lillian Phillipson, Alice Lilian Gray, Olive Mary Salmon, Faranella Gladys Smith.
Surrey, Netherne.—Emma Laura Shaw, George William Humphreys, Gertrude Emily Boyles.
Sussex, Hellingly.—Elizabeth S. Hardiman, Mabel White, Eliza Annie Thomas, Eliza Bolton, Thomas Turner, Ernest Edwards, John Patrick Healy, William George Brown.
Sussex, Chichester.—Beatrice Louise Larcombe, Agnes Delany, Florence Emily Northcote, Kitty Mary Gardner.
Worcester, Barnsley Hall.—Augustus John Watts, William Edward Price, May James.
Yorks, Beverley.—John Robert Wilson, Annie Pluck.
Yorks, Clifton.—Lilian Ada Mills, Annie Gray, Jessie Mills.
Yorks, Wadsley.—John Robert Boulter, Charles Smithson, Fred Hartwell.
Birmingham, Winson Green.—Florence Mabel Foxall, Louisa Salt, Selina Annie Pugh.
Birmingham, Rubery Hill.—Gertrude Marian Turley, Lucy James, Agnes Florence Beard.
Canterbury.—William Ernest Sayer, Frances Irene Edwards.
Hull.—Matthew James Clarke, William Blades.

- Leavesden*.—William Henry Anderson, Olive Hannah Osborne, Katherine Emilene Lee, Adeline Annie Richardson.
- Leicester Boro'*.—Sarah Heapsey Siddall, Eliza Mary Freeman, Agnes Hardy, Henry Campton Chamberlain, Hannah Armstrong.
- City of London*.—Constance Amelia Miller, Ethel Grace Bailey, Mollie Daly, Nellie Davies.
- Middlesboro'*.—George Millar, Herbert Mowzer.
- Sunderland*.—Laurence Redpath (with distinction), Sarah Goodship Stonebridge, Ellen Thompson Laybourne.
- West Ham*.—Charles Leonard Hamilton Ward, Elizabeth Morrison.
- Bailbrook House*.—Eleanor Mabel Bowen.
- Bootham Park*.—Mary Alice Taylor.
- Bethlem*.—Laetitia Pead, Edgar James Belcher Davis.
- Camberwell*.—Olivia Juliet Godwin-Hill, Ruth Westhead, Ellen Elizabeth Gardner.
- Coton Hill*.—Amy Doris Reynolds, Harriet Tyler, Ada Lydia Raworth.
- Holloway Sanatorium*.—Catharine Forrestal, Eleanor May Elizabeth Gill.
- St. Luke's*.—Georgina Baker (of Cheddleton), Mabel Boston, Katherine Humphreys, Emmie Bower.
- Ticehurst*.—Kate Emily Jones.
- Wonford*.—Rosalie Paton.
- Retreat*.—Elgin Carnegie Ross, Dorothy Frances Wilkinson, Hannah Watson, George Wiles, Harriett Clifford, Daisy Helen Millard, Helen Louisa Holroyd.
- Aberdeen Royal*.—Margaret Duncan, Annabella Thomson, Elizabeth Hutcheon Lorimer, Catherine Sang McPherson.
- Aberdeen District*.—Helen Kemp, Elizabeth M. Burr, Mary Jane Bruce Craigans, Mary J. Simpson.
- Argyle and Bute*.—John Archibald MacDonald, Murdoch Macleod, Mary Fletcher, Jean Bain.
- Ayr*.—John Donald, Christina MacFayden Henderson, Jessie Carmen Perrie, Susanna Gemmel Thom, Jessie de Silva Masterson, Mary Carswell Todd Auld, Alice Davidson.
- Crichton*.—William Handley, Susan McDonald, Lena Shelbourne, Margaret Maclean Urquhart.
- Dundee*.—Lizzie Carr, John Lyall, Jessie Mackay.
- Bangour*.—Mary Wallace Thomson, Emily Wailles, Ada Robinson, Ruth Corrigall Henderson, Katherine Munn Calder.
- Edinburgh, Craig House*.—Margaret E. Ranken, Maggie Bella Robertson, Katherine J. D. Manson, Catherine G. Sutherland, Isabella Leishman, John S. McLean, James Shaw.
- Elgin District*.—Jeannie Clark.
- Fife*.—Ina Keith.
- Gartnavel*.—Patrick McManus, Jeannie Crawford (with distinction), Margaret Campbell, Mary Frater, Jane Brittain, Margaret M. MacAulay, Isabella Ross Mackenzie, Mildred Jack.
- Gartloch*.—Kate Campbell Stronach (with distinction), Margaret Crawford Bain, Elizabeth Harris, Paterson, Mary Macdonald, Bessie Gibson Tinto, Mary Ellen Oselton, Margaret Rennie.
- Woodilee*.—Isabella J. H. Cross, Margaret Spence London Reid.
- Hawkhead*.—Mary Hamilton Reynolds, Margaret Walker, Alexander Baillie, Margaret Black Ross, Stephen Easson, May Anderson Elliott.
- Lanark*.—Frances Mary Duncan, Elizabeth Thom Henderson (with distinction), Isabella McColl, Georgina Prentice.
- Midlothian*.—Helen Matthew, Emily Alexander, Christina Morrison Thomson.
- Montrose*.—Elizabeth Murray Cuthbert, Mary Helen Mearns, Maggie Ramsay, Elsie Cumming Robb.
- Perth District*.—Jeanie Spence, Mary E. Leith, Margaret M. Murray.
- Murray, Perth*.—Elizabeth Middleton.
- Renfrew*.—Sarah May Fletcher, Jennie Crickard.
- Stirling*.—Marion Macdonald, Elizabeth Findlay.
- New Saughton Hall*.—Christina Smith Simpson.
- Larbert Institution*.—Annie Lawless.

Downpatrick.—Anastasia Bergin, Grace Price, Annie McConbrey, William Joseph Shields, Hugh Cunningham.

Kilkenny.—Mary Shekleton, Patrick Corcoran, Ellen Bolger.

Mullingar.—Christopher Scally, Ellen Hynes.

Richmond.—Katie Henry, Elizabeth Hall, Bridget Connaughton.

Portrane.—Annie Mullarkey, Maggie Kennedy, John Phelan, Michael Fagan.

Warwick County.—George H. Hancock, Olive D. Huckfield, Christabel King, Annie E. Jackson.

PRELIMINARY EXAMINATION, MAY, 1915.

Berks County.—George Page, Alfred Stickley, Florence Eliza Brittain, Edith Lillie Plumb, Lilian Emily Gray, Margaret Mabel Bodycombe.

Chester, Upton.—Edith Diggory, Beatrice M. Hartshorn, Ruth Williams, Robert E. Cropper, Harry Thomas.

Cumberland and Westmorland.—Isabel F. McCallum, Annie J. McIntosh.

Denbigh, N.W.—Robert Smith, Thomas Hughes, John Blythyn, Ellis Jones, John Davies.

Durham County.—William E. Dickinson, Ellen M. Rudd, Margaret E. Gallacher, Robert Cunningham, Tom H. Wetherill.

Essex, Brentwood.—Elizabeth Wilson, Annie E. Humphries, Ailsa F. Ashley, S. L. Parsons, Priscilla Young, Dorothy M. Wilson, Martha Crowe, Jeannie Colahan.

Essex Severalls.—Mary K. Hooker, Florence Riddiford, Violet Large, Annie Hughes, Ethel Randall, Walter A. Comer, Arthur H. Markland, Robert Raw.

Glamorgan, Bridgend.—Edward P. Kiernan, Mary E. Thomas, Sarah A. Hancock, Urania Morris, Louisa Jones, Annie Davies, Charlotte M. Drew, Olive A. Watkins, Tryphena B. Thornton, Margaret J. Davies, Thomas Husband, Lilian Watkins, Catherine J. Griffiths, Edith M. Williams, Edith Joseph, Annie Bradley, Donald Woodward, Nicholas Magdolino, John Davies, William J. Parr, Joseph Carr.

Herts County.—Elsie E. D. Chambers, Elizabeth A. Richardson.

Kent, Barming Heath.—Sarah L. Owen, Annie E. King, Elizabeth Turnbull, Doris A. Ryan, Roma Hurley, Annie F. Burridge, Lilian M. Bruce, Minnie Browne, Daisy Woolley.

L.C.C., Banstead.—Kate Mills, Evelyn R. Horton, Mabel E. Bywater, Rose A. Quinn, Frank King.

L.C.C., Cane Hill.—Adeline F. Wing, Helen Stearman, Mary E. Dunn, Eleanor Shepherd, Rosannah Marsh, Annie M. Marshall, Kate L. Robinson, Florence E. Rogers, Laura Pollard, Florence Payne, Emily E. Illman, Joanna D. Lamb, Constance Stainer, Florence E. Couchman, Glanffrwydd M. Williams, Thomas W. Page, Charles H. Crutch, Albert E. De Rose, Ernest E. Boniface, William T. Mollard.

L.C.C., Manor.—Florence E. Wood, Lily M. Morris, Daisy L. Field, Florence A. Glancy, Celia Place, Ethel E. Bate, Florence Francis.

L.C.C., Long Grove.—Edith E. Hawkins, Sabina Clarke, Jane Chesney, Louisa M. Pharaoh, Mary W. Davies, Leslie T. Walker, Alfred Simpson, William T. Warren, Albert J. Churchman.

L.C.C., Claybury.—Dacia M. Parrott, Catherine J. Harrison, Mary Griffin, Rose E. Hicks, Amy Carter.

L.C.C., Colney Hatch.—Ada Bradshaw, Alice M. Summerhill, Emma Marshall, Dorothy M. Bettridge.

L.C.C., Hanwell.—Florence K. Gascoyne, Ethel L. Ashford, Grace Brumley, Mabel Blanch Hender, Bessie D. Crossley, Stella M. Rust, Constance E. Stephenson, Ada Wandsworth, Adelaide M. Herbert, Minnie J. Mallion, Mary Russell, Beatrice E. Marsh, Mary V. Bennett, Mabel C. Kerr, Ethel E. Gascoyne.

L.C.C., Bexley.—Katherine E. Gander, Ida G. Flanders, Annie MacMahon, Belinda F. Cusack, Mary Greenwood, Mary A. Stocker, Florence E. B. Collins, Dorothy A. Russell.

Epileptic Colony, Ewell.—Jessie E. Dawson, Catherine L. Peck.

Isle of Wight.—Olive E. White, Ethel M. Fairweather, Margaret M. Jones, Grace A. Taylor, Beatrice F. M. Glew, Adela B. Stubbs, Eleanor Barrett.

Lancaster County.—Helena M. Lambert, Lilian Goodwin, Florence Rawlinson, Mildred A. Cowperthwaite, Margaret G. Anderton, Elsie P. Harper.

Middlesex, Napsbury.—Brigid M. O'Sullivan, Muriel E. Western, Ernest G. Mattick, George Lyons.

Northants. County.—Frederick C. Coupland, Charles H. Houlden, Sarah E. Roberts, Elured Parry, James W. Twite.

Notts County.—Edith Shuttleworth, Kitty Nolan.

Oxford County.—Winifred Johnson, Mary Taylor.

Shropshire County.—Violet M. Brooks, Margaret E. Davies, Ethel Morgan, Martha Willetts, William P. Jones, May E. J. Maddox, Gladys L. Davies.

Stafford, Burntwood.—Grace Dorothy Perry.

Stafford, Cheddleton.—Florence Taggart, Katie Farrell, Hylda M. Thomas, Bridgid Farrelly.

Suffolk County.—Arthur G. Saunders, Susan Gibbon, Lilian M. Brown, Clara Parsons.

Surrey, Brookwood.—Beatrice F. Gardner, Ellen Cleary, Margaret B. Craig.

Surrey Netherne.—Elsie Kilgower, Violet E. Hall, Ellen M. Tye, Eva G. Pickard, Julia L. Gibson, Grace B. R. Theis.

Sussex, Hellingly.—Blanche Beebee, Isabella Weir, Emma L. Stevens, Isabella E. Ormonde, Mary A. Turner, Lilian Nugent, Ruth Brown, Daisy Marfleet, Ethel E. Duley, Ethel Steer, Edith A. Langley, Arthur A. Redman, Charles Lewis, Fredk. J. Glover, Percival V. Godley, John E. N. Ingram, Thomas G. Hartnett.

Sussex, Chichester.—Ivy E. Sansom, Winifred Johns, Eliza M. A. Probert, Olive G. Williams, Nellie B. Tobin, Dorothy M. Hewer, E. Betts, H. Long, J. Nicholson.

Yorks, Beverley.—Herbert Stephenson.

Wadsley.—Alfred Wood, Horace Harper, Walter Crapper.

Yorks, Clifton.—Gladys Stacey, Sarah Dale.

Worcestershire, Barnsley Hall.—Sarah E. Osborne, Nellie Smith, Annie E. Shenton, Edith B. Ashton, Ada A. Seeley, William F. G. White, Sydney J. Phillips, George T. Wright, Charles F. Rice.

B'ham, Winson Green.—Nathaniel Clayton, Ann Weston, Louisa Churn, Edith N. Watson, Elsie Green.

Caterham.—Clara C. Sutton, Ellen M. Chamberlain, Mabel A. Sycamore, Alice Ingersoll, Dorothy M. Williams, Ethel F. Hobbs, Mary Ann Williams, Dinah F. Williams.

Gateshead.—Agnes Walmesley, Lily Lund, Joseph Bell.

Hull City.—Cissie Kell, Alice M. Turnill, Catherine E. Tait, Tom Wilson, Louise Brackenbury, Esther Hughes, Amelia Ross, Annie R. Allison, Alice A. Gash, Thomas Hughes.

Leicester Borough.—Elizabeth M. Mulvaney, Annette F. Dale, Florence E. Ecob, Martna E. Loane, Ethel Preece, Jessie E. Rowell.

London City.—May L. Webb, Mabel John.

Newport, Mon.—Benjamin T. Pritchard, Edward Humphry, Ralph Luffman, Josiah Grivell, Francis W. White.

Leavesden.—William Lawrie Blues.

Norwich City.—Lily B. Brown, Hilda E. Thompson.

Portsmouth Boro'.—Margaret M. Dick, Catherine F. Guyatt, Elsie M. Roome, Constance A. Cradock, John Cole, David McWren, Ethel Wiscombe, Harriet Dearing, Ivy Winifred Cotton, Bertha D. K. Parkes, Mabel A. Guyatt, Lily Dunster.

Sunderland Boro'.—Andrew Collins, William T. Woods, Phylisa M. Forster, Gladys Robinson, Mary A. Yore.

West Ham.—Lily A. Peapall, Lillian A. Allen, Clara Spurgeon, Florence G. Davis, Hilda V. Wooler, Elizabeth E. Ayton, Rosie Lummis, Edith Thorne, Edith Gibson, Frances Evans, Ethel Gladys Seaward, Alice B. Jenkins.

Bailbrooke House.—Emily Trevis, Florence L. Morris.

Bethlem Hospital.—Emily Burt, Maud Page, Catherine Brown.

Bootham Park.—Maria M. Williams, Lily Robinson, Isabel A. G. Allardyce, Kathleen M. Walker, John Henry Darley, Charles Hubbard, Frances Newton.

Camberwell House.—Christine H. Robertson, Laura Johnson, Violet G. Woolridge, Georgina Creak, Elsie L. Palmer, Ella M. Fry.

Coton Hill.—Frederick Cooke, Elsie M. Ledger, Florence Cox, Emma L. Longman, George A. Wilshaw, Edith Davis.

Fenstanton.—Hilda Hughes, Louie Palmer, Emmie Dommett, Elizabeth Mitchell.

Holloway Sanatorium.—Jessie K. Gray, Olive M. Martin, Florence Arslett, Lily F. Willington, Marjorie N. Ellis, Ida Richards.

Retreat, York.—Violet S. Huggard, Edith Kelly, Rachel A. Morley, Elizabeth M. Purcell, Amy Skelding, Elizabeth H. Thomson.

St. Andrew's Hospital.—Roland J. Waters, Thomas L. Naylor, Charles Miles, Mark Johnson, Lewis Duckett, Dorothy A. Raban, Annie Lee, Emily C. Sample, Ethelwynn J. Parker, Ida P. Bullock, Mary J. Raban, Daisy A. Hannell, Elsie Fisher, Jennie Riley, Elsie M. Buller, Annie B. Cory.

St. Luke's.—Ethel J. Green, Kate S. E. Stevens, Annie L. Weare, Georgina M. Innes, Ethel M. K. Innes.

Middleton Hall.—Florence E. Helliwell, Beatrice A. Oliver, Ellen G. Butters, Priscilla Farley.

Aberdeen Royal.—Margaret C. Pirie.

Aberdeen District.—Margaret P. Robertson, Catherine M. McPetrie, Helen G. Shepherd, Christina McKellar.

Argyle and Bute.—Marjorie Thomson, Alexandrina McDonald, Marion L. Macindoe, Elizabeth M. Garrow, Helen Craigan.

Ayr.—Annie Strachan, Annie R. Dickie, Christina S. Smith, Thomasina Gibson, Annie Young, Dougald McIntyre, James Ross, George Burns.

Crichton.—Lewis Falconer, James Kerr, James McCaughey, Margaret Brown, Joan B. Duncan, Elizabeth Edgar, Janet T. Gilmour, Annabella M. Groat, Margaret Jamieson, Martha R. Kerr, Elizabeth Miller, Sarah L. Murray, Annie B. McConachie, Elizabeth McCrorie, Sarah McMillan, Annie Nelson, Jessie Shaw, Isabella Smith, Jeanie Stewart, Beatrice H. White, Isabelle H. Williamson, Margaret Wilson, Theodore Johnston, Harriot Baker, Agnes Scambler, Marjory Sidey, Jean Welsh.

Dundee District.—Frieda Sautermeister, Lizzie Lovie, Christina Low, Christina Byrne, Jane McDonald, Helen Buist, Jean Buchan.

Edinburgh Royal.—Maggie M. McGillivray, Ethel Waller, Daphne B. Dickson, Helen McArdle, Lillian Bateman, Edith Bateman.

Craig House.—Alice Macintosh, Catherine A. J. Kirkness, Annie Hendrie, Barbara E. Robertson.

Edinburgh District.—Margaret A. Y. Jackson, Georgina Fleming, Marion Allan, Margaret I. Munro, Euphemia Thomson, Sarah A. Emmett.

Fife and Kinross.—Jane O. Beattie, Andrew Paterson, Mary Duncan.

Gartloch.—Joseph Feeney, John McDonald, John F. I. Macdonald, Annie R. Dryburgh, Margaret Macleod, Jane Carrie Bryan, Agnes Rankin, Elizabeth B. Miller, Annie Campbell.

Gartnavel.—Annie Tennant, Eliza S. Bell, Jeannie McLean, Annie Martin, Catherine A. Macaulay, Nellie Merrilees, Mary E. Campbell, Harriet Mackinnon.

Woodilee.—William MacFadyen, Catherine Wright, Ellen Wilson, Flora Macdonald, Margaret Loney, Isobel McK. Robertson, Robina S. Galt, Sarah Kelly, Violet R. Phillips, Mary Kennedy.

Haddington District.—Marie L. Cleugh.

Inverness.—Christina M. Mackenzie, Mary A. Mackay, Margaret Hughes.

Lanark.—Barbara Anderson, Isabella Russell, Agnes Smith, Harriet M. Syme, Ethel Fraser.

Montrose.—Elizabeth A. D. Stephen, Margaret Duncan, Jessie Spalding, Margaret J. Blair, Annie P. Black, Agnes Anderson, Lizzie Valentine.

Melrose.—Sarah H. Thomason, Janet Thomson, Catherine McKay, Donald Campbell.

Hawkhead.—Frances Lyon, Joan Miller, Margaret Macdonald, Hugh McLean, Annie N. Gilmour.

Renfrew.—Ethel Wilkinson, Grace A. Niles, Marion Cameron, Flora McDonald, Jessie E. Wood.

Murthly, Perth.—Anna MacDonald, Eliza Noble, Fanny B. A. Cuthbert.

Murray, Perth.—Jean L. Warden, Helen M. Smith.

Larbert.—James Taylor, Annie Townsend, Margaret Stuart, Jean Sloan, Annie R. McDonald, Annie Macrae, Irene M. Lowes, Katherine McLeod, Elizabeth Kelly, Janet M. Donnan, Christina Cloonan.

New Saughtan Hall.—Lillias Campbell.

Enniscorthy.—Arthur Doyle, Lucinda A. Pierce.

Ballinasloe.—Michael Carroll, Willie Morgan, Francis Clayton, Nora McHugh, Ellie Coyne, Julia Donohoe, Isabel Robinson, Mary J. Queeney, Aileen H. O'Conner.

Richmond.—Eleanor Furlong, Mary Dempsey, Mary O'Connor, Margaret Clarke, Nicholas Meehan, Thomas Fagan.

St. Patricks.—Kathleen McCarthy, Marcella Ennis.

Bloomfield.—Ellen Traynor.

Mullingar.—Mary Mulligan, Daniel Brennan, Joseph Farrell, Lizzie Christie, Bernard Mulligan, Patrick Creamer, Teresa M. Diffley, Cecilia McDonnell.

Portrane.—Hugh Kirwan, John Kinsella, Rose Cartwright, Bridget Murtagh, Mary E. Clarkin.

Londonderry.—Edward McGinty.

Larbert Institution.—Mary Buchannan Fraser, May Shepherd, Sarah Williamson Miller, Alice Lever Ormerod, Margaret Thomson, John Ferguson.

Notts City.—Arthur Smith, Florence Swinbourne, Lillian Peat, Martha Robinson, Ada Cuthbert.

Warwick.—Jessie Rosina Brighton, Clara Emily Genders, Lilian Hildegard Harris, Ada Mary Lowe, Catherine Josephine Rhodes, Amelia Fanny Marshall, Charlotte Anne Edwards.

MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND.

EXAMINATION FOR NURSING CERTIFICATES, MAY, 1915.

List of Questions.

1. Describe how the temperature of the body is kept at an approximately constant point in health.
2. A patient complains of pain : what particulars should be ascertained regarding it to enable a full report to be made to the doctor ?
3. What is peritonitis ? Mention some of the causes, and describe the symptoms of this disease.
4. State the distinguishing characteristics of the specific fevers, as a group of diseases.
5. What is meant when we say a patient is the subject of (a) a delusion, (b) a hallucination, (c) an obsession ?
6. Briefly describe the changes produced in the brain by the disease known as general paralysis.
7. How may an hysterical fit be distinguished from an epileptic fit ?
8. Describe the mental characteristics of any case of senile insanity which you have had under observation.

MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND.

PRELIMINARY EXAMINATION, MAY, 1915.

List of Questions.

1. Describe a voluntary muscle. What is the difference between voluntary and involuntary muscles, and give an example of each.
2. What are the cavities of the human body ? Enumerate, without describing, the contents of each.
3. Where are the kidneys situated ? What is their function ? What is the average quantity of urine secreted in 24 hours ? Mention some of the chief constituents of urine.
4. Describe the position and course of the main arteries in the arm and forearm. Name the methods of applying pressure to the arm in cases of hæmorrhage, stating at what points each of these is suitable.

5. What symptoms would lead you to suspect
 - (a) Fracture of a rib?
 - (b) Fracture of the neck of the femur?
6. What are the symptoms of a sprain? How would you deal with a sprained ankle (a) in the day room of an asylum; (b) when out on a country road about one mile from home?
7. How would you deal with a person whom you saw fall in an epileptic fit?
8. What rules should be observed when giving a patient a bath?

OBITUARY.

SIR THOMAS SMITH CLOUSTON.

Psychiatry and the Medico-Psychological Association have lost a great leader by the death of Sir Thomas Smith Clouston.

Others will write of his life and labours, his lectures and his writings, his achievements and his honours. I write only of his personality, as tested by a friendship of over fifty years. We first met in the autumn of 1861, and we lived in close association as fellow-assistants in the Royal Edinburgh Asylum for about eighteen months, till in 1863 we were both appointed Medical Superintendents, he of the Carlisle and I of the Glamorgan Asylum. In those months of daily intercourse we came to know each other well, and an intimate friendship was the result. Our able and genial chief, Dr. Skae, trusted his assistants entirely, and gave them a sense of responsibility which made them do their best, and thus our work became a constant and engrossing pleasure. Our sitting-room was in common, and many a mental, moral and spiritual theme was discussed there, often far into the night. Clouston was a fluent and forcible speaker, often the more forcible the less sure he was of his own view, but he could always differ pleasantly and without shadow of offence. He did not suffer fools gladly, unless indeed when he could laugh them out of their folly. He himself took chaffing well, and returned it smartly. He was only seriously angry at outrageous stupidity, meanness, or wrong doing, or, most of all, at being roused when asleep on the sofa to be told it was long past bedtime—then he was positively dangerous.

We had our full share of those social pleasures which are often as beneficial to the alienist as philosophic discussions. We had many friends in Edinburgh, including a delightful American family whose house was always open to us. Here Clouston found the charming lady who became his wife, and who has been his devoted helpmeet for over fifty years.

After we left Morningside there was a gap in our intimacy (though not in our friendship) of about eleven years. We were separated by more than 300 miles; each was busy with his own work in his own surroundings and amid his own difficulties, and we were only able to meet occasionally at medical gatherings.

In 1873 Dr. Clouston was appointed Physician Superintendent of the Royal Edinburgh Asylum, and in the following year I became head of the Glasgow Royal Asylum; thus we came more into touch with each other again, both having belied the old jibe that Scotsmen who go south never return to their native north. But though we met more frequently now, we were both at the busiest period of our lives and our work demanded our closest attention. We both regretted that we so seldom had opportunity for purely social intercourse, and for reviving and talking over the delightful memories of earlier days. In 1889 I was asked to write a character sketch of Dr. Clouston, to be published with his photograph in the *American Journal of Mental Science*. I cannot do better than quote a few sentences, for what he was then he was to the end:

"His practical energy is in rare association with a keen philosophic mind, alive to the correlations and affinities of disease, eager to generalise, and apt to be impatient of facts which disturb the symmetry of a generalisation.

"The philosophic spirit which animates his medical work, and his faith in the gospel of science, his clear and positive opinions and the force with which, when interested, he urges or defends them, his eager love of work, his intolerance of pretence, the heartiness of his friendships, and the vigour of his dislikes are all characteristic.

"Whatever the work to be done, or the end to be gained, Dr. Clouston puts out his full strength to accomplish it."

The onerous and responsible duties of the Asylum, and the multiplicity of his other engagements began gradually to tell on his health, and in 1908 he wisely resigned the post he had filled so long and so well. With greater leisure his health materially improved, and he by no means sought retirement. He continued his consultation work and his lectures, and his pen was as facile and busy as ever.

To one of his active habits and eager mind a long illness would have been specially trying, and he had often expressed the hope that this might not be his case. He had his wish—suddenly becoming unconscious, and passing painlessly away.

Thus ended a vivid, laborious, and useful life, crowned with success and honour.

DAVID YELLOWLEES.

As one of the oldest of Clouston's friends, I feel that I should like to contribute a few lines to his memory.

I had known him for forty years, and there seemed to me very little difference in the Clouston of the 'seventies and of the new century. Always earnest, always eloquent, ever ready to combat any unsupported statement.

Full to overflowing of facts and experience, hard perhaps to persuade, but, convinced, he was ready to accept the new position. A ready writer, his tendency was perhaps to too frequent appeals to the public, but he was so fully persuaded that he had a very important message to deliver that he was bound to write.

He was too late to be able personally to conduct original pathological work, but he encouraged it in all those under him.

His forte undoubtedly was clinical. In the wards and in the lecture theatre he was a master, and Morningside became a Mecca for the student of psychiatry.

He did not read foreign medical literature, and his writings represent the result of his own enormous experience.

I wish I had known him in his Orkney home, for I should like to have a memory of him with a gun or fishing-rod, as well as with a pen and case books.

Earnest, strong, and practical, he will leave a name on our Roll of Honour.

GEO. H. SAVAGE.

The life of a man with the energy, capacity, and opportunity such as the late Sir Thomas Clouston had must needs provide much material for study and record. No doubt the editors will receive many accounts of that life, especially in its central and later periods; I venture to offer a few remarks concerning the earlier portion, when, as his assistant, I had the best of opportunities for noting his characteristics. The success which attended his administration of Morningside in itself predicates the existence of a fixed plan, and of a vigorous determination to carry out that plan. Of these there was plentiful evidence. On his taking up the position of Physician-Superintendent a quiet change at once came over the office-work, the case-books, note-taking, etc. So too with the re-grouping of his patients, the tightening up of discipline, and so forth. All this was brought about almost before the greatness of the change was recognised. Dr. Clouston was then indeed a young man for such a responsible post, which was made the more onerous by reason of the necessity for radical changes. Nevertheless, it was recognised early that on young shoulders there was an old head. Dr. Clouston's personal enthusiasm in improvement carried all with him. The thing that struck one most was his enormous capacity for work. Even then there was a considerable number of private patients of the higher classes, involving much correspondence, as well as personal attention. Beyond these the whole of the rate-paid department was visited each day, and with such care that a thorough knowledge of each case, private or pauper, was acquired with astonishing rapidity. The daily round with him was, of course, most instructive, as he had a masterly way of quietly pointing out similarity of points in various cases, which was the first step towards the classification of his patients. Indeed, classification in those days was so simple as to be nearly non-existent. He was a warm supporter of Dr. Skae's ætiological grouping. Though this

scheme cannot be defended in these more scientific days, I feel bound to confess that from a broad clinical point of view I have found it myself to be quite useful. Dr. Clouston was at that time very ardent in the study and exploitation of drugs, having recently obtained the Fothergill Prize for his work thereon. He was liberal in giving one his views, and thus one got a better idea of the power of drugs, as well as their limitations of usefulness. Cannabis indica was then being experimentally used to a great extent. Morningside had not then undertaken section-cutting, or any form of special research, and the work, extensive as it was, was almost entirely clinical. This may be considered to have been fortunate, in so far that nothing interfered with the clinical work that laid the foundation of that great concept of developmental insanity, which will always be regarded as the greatest gift that Sir Thomas Clouston has bequeathed to psychiatry. His doctrine has been settled on sure scientific foundations, but it was his early clinical work which enabled him to draw his scientific deductions with a sure hand.

It is ill work to criticise the points of character in one's former chief. I am spared all temptation to indulge in such criticism, as I have nothing to criticise. He was eminently a just man, and that in itself covers everything. I, and probably all others who had a similar advantage, have always felt that the time passed under his guidance was time well spent, and led to a sensible strengthening by example of those characteristics which are required for the right care of the insane.

H. HAYES NEWINGTON.

NOTICES OF MEETINGS.

The Seventy-fourth Annual Meeting of the Association will be held on Thursday, July 22nd.

The Divisional Meetings are proposed as follows:

South-Eastern Division.—October 6th, 1915; April , 1916.

South-Western Division.—October 22nd, 1915; April 21st, 1916.

Northern and Midland Division.—October 7th, 1915; April 27th, 1916.

Scottish Division.—November 19th, 1915; March 17th, 1916.

Irish Division.—November 4th, 1915, Royal College Physicians, Dublin; April 6th, 1916; July 6th, 1916.

APPOINTMENTS.

Burke, J. D. G., M.B., B.Ch., R.U.I., Assistant Medical Superintendent, Exeter Asylum.

Ogilvie, W. M., M.B., C.M., Aberdeen, Medical Superintendent of the Ipswich Borough Mental Hospital.

Rowan, Marriott Logan, M.D., R.U.I., Medical Superintendent of the Derby County Asylum, vice Dr. Legge, retired.

ASYLUMS ROLL OF HONOUR.

The following particulars have been kindly supplied to the Editors through the medical superintendents of the county, borough, and district asylums of Great Britain and Ireland.

ASYLUMS WHICH HAVE BEEN CONVERTED INTO WAR HOSPITALS IN WHOLE OR IN PART.

Birmingham Borough, Rubery Hill, now "Birmingham War Hospital."

Bristol Borough, Fishponds, now "The Beaufort War Hospital."

Cardiff Borough, now "The Welsh Metropolitan War Hospital."

Lancaster County, Winwick, now "The Lord Derby War Hospital, Warrington."

London County, Horton, now "The County of London War Hospital, Epsom."
 Middlesex County, Napsbury: The hospital portion of the Asylum has been converted into a war hospital; negotiations are in progress for the rest of the asylum to be taken over by the War Office as a hospital.

Middlesex County, Wandsworth; part only as a war hospital.

Norfolk County, Thorpe, Norwich.

Northumberland Borough, now "Northumberland War Hospital."

West Sussex County, Chichester, now "Graylingwell War Hospital."

Yorks County, West Riding, Wadsley, now "The Wharnccliffe War Hospital."

Edinburgh District, Bangour Village, now "The Edinburgh War Hospital."

MEDICAL SUPERINTENDENTS WHO HAVE JOINED THE R.A.M.C.

The following Medical Superintendents have been constituted Officers in Charge of their respective asylums, after these were converted into war hospitals, with the rank of Lieut.-Col., R.A.M.C.:

Dr. G. Goodall, Cardiff Borough Asylum.

Dr. John Keay, Bangour Village, Edinburgh.

Dr. H. A. Kidd, West Sussex County Asylum.

Dr. J. R. Lord, Horton Asylum, Epsom.

Dr. A. Simpson, Lancs. County Asylum, Winwick.

Dr. D. G. Thomson, Norfolk County Asylum.

Dr. W. J. N. Vincent, West Riding Asylum, Wadsley.

Dr. Reginald Worth, Middlesex County Asylum, Wandsworth, Major R.A.M.C.

OTHER MEDICAL SUPERINTENDENTS WHO HAVE JOINED THE R.A.M.C.

Dr. M. A. Collins, Ewell Colony, Epsom.

Dr. A. U. Davis, Devon County Asylum, Exminster.

Dr. J. Dixon, Leicester Borough Asylum.

Dr. Langdon Fuller Hanbury, West Ham Borough Asylum (Army, Sportsman's Battn.).

Dr. J. C. McConaghey, retired Medical Superintendent, Chester County Asylum, Parkside.

Dr. M. A. Archdale, East Riding Asylum, Beverley, Captain, 3rd Northumbrian Field Ambulance, T.F., in Flanders.

Dr. J. St. L. Kirwan, Mayo County Asylum, Ballinasloe, has volunteered, with motor-car, for home service.

ASSISTANT MEDICAL OFFICERS WHO HAVE JOINED THE SERVICES: ENGLAND AND WALES COUNTY AND BOROUGH ASYLUMS.

<i>Asylum.</i>	<i>Names of Assistant Medical Officers.</i>
Beds, Herts, and Hants	Dr. N. J. H. Gavin has joined the National Hospital for Paralysed and Epileptic, Queen's Square, W., used in June as a War Hospital.
Berks County	Dr. Sydney E. Holden, R.A.M.C.
Brecon and Radnor	Dr. Drummond, R.A.M.C.
Birmingham Borough	Dr. G. E. Shaw, R.A.M.C.
" " " "	Dr. Robert Thomson, R.A.M.C.
Brighton Borough	Dr. G. H. Smith, R.A.M.C.
Canterbury Borough	Dr. W. F. Henderson, R.A.M.C.
Cardiff Borough	Dr. E. B. C. White, Registrar, War Hospital.
Chester County, Upton	Dr. A. Lilian Muncaster, Serbian Relief Ambulance Corps.
Cornwall County	Dr. Geo. M. C. Powell, R.A.M.C.
Croydon Borough	Dr. Sydney Jacob, R.A.M.C.
" " " "	Dr. Peter Burrowes Kelly, Royal Navy.

*Asylum.**Names of Assistant Medical Officers.*

Denbigh County	Dr. Benson Evans, R.A.M.C.
Derby Borough	Dr. S. D. Robertson, R.A.M.C.
" County	Dr. W. Eager, R.A.M.C.
" "	Dr. C. F. Bainbridge, Royal Navy.
Dorset "	Dr. Moir Gray, Royal Navy.
Durham "	Dr. G. F. May, R.A.M.C.
" "	Dr. J. P. Race, R.A.M.C.
Ewell Colony (London District) .	Dr. A. A. W. Petrie, R.A.M.C.
Hants County	Dr. John Luke Jackson, R.A.M.C.
Hereford County	Dr. H. M. Pentreath, R.A.M.C.
" "	Dr. W. E. Stevenson, R.A.M.C.
Kent County, Chartham	Dr. J. A. Lilly, R.A.M.C.
" "	Dr. J. F. Dunlop, R.A.M.C.
Lancaster " Co., Lancaster Moor .	Dr. R. G. Rows, R.A.M.C.
" " " "	Dr. Hugh McManus, R.A.M.C.
" " Rainhill	Dr. H. Victor Lamb, R.A.M.C.
" " "	Dr. T. J. Fehily, R.A.M.C.
" " "	Dr. J. E. Smith, Territorial Field Ambulance.
" " "	Dr. G. F. Denning, Territorial Field Ambulance.
" " Winwick	Dr. F. M. Rodgers, R.A.M.C.
" " "	Dr. R. B. F. McKail, R.A.M.C.
" " "	Dr. C. Clayton, R.A.M.C.
" " "	Dr. E. R. Stone, R.A.M.C.
Leicester County	Dr. Thos. Murray, R.A.M.C.
Leicester Borough	Dr. P. C. Hobbs, R.A.M.C.
Lincoln County, Bracebridge . . .	Dr. Barkley, R.A.M.C.
London " Banstead	Dr. Geoffrey Clarke, R.A.M.C.
" " "	Dr. Leonard Wooton, R.A.M.C.
" " "	Dr. R. W. W. Vaughan, R.A.M.C.
" " "	Dr. M. W. Ruthven, R.A.M.C.
" " "	Dr. C. W. Forsyth, R.A.M.C.
" " Bexley	Dr. E. Faulks, R.A.M.C.
" " "	Dr. R. Macdonald, R.A.M.C.
" " "	Dr. W. E. Fox, Royal Navy.
" " "	Dr. W. P. Vicary, Royal Navy.
" " Claybury	Dr. Guppy, R.A.M.C.
" " "	Dr. F. H. Pain, R.A.M.C.
" " "	Dr. F. Rashbrook, R.A.M.C.
" " "	Dr. H. M. Vivian, R.A.M.C.
" " "	Dr. C. StA. Moodie, R.A.M.C.
" " Colney Hatch	Dr. J. MacArthur, R.A.M.C.
" " " "	Dr. E. E. Isaac, R.A.M.C.
" " " "	Dr. V. L. Connolly, R.A.M.C.
" " " "	Dr. H. W. Parnis, R.A.M.C.
" " " "	Dr. P. P. Butler } <i>Locum</i> R.A.M.C.
" " " "	Dr. R. C. MacLachlan } <i>tenens</i> .
" " Hanwell	Dr. Robert Stewart Miller, R.A.M.C.
" " Horton	Dr. O. P. N. Pearn, R.A.M.C.
" " "	Dr. N. N. Roberts } R.A.M.C.
" " "	Dr. R. G. Riches } In War Hospital.
" " Manor	Dr. T. W. R. Strode, R.A.M.C.
Middlesex County, Napsbury . . .	Dr. G. S. Blandy, R.A.M.C.
" " "	Dr. A. M. Thomson, R.A.M.C.
" " Wandsworth	Dr. Willis, R.A.M.C.
" " "	Dr. Waldo, Royal Navy.
Newcastle-on-Tyne Borough . . .	Dr. G. A. Berkeley Cole, R.A.M.C.
" " "	Dr. J. W. Valentine Curtain, R.A.M.C.
" " "	H. D. MacPhail, R.A.M.C. In War Hospital.

<i>Asylum.</i>	<i>Names of Assistant Medical Officers.</i>
Norfolk County	Dr. T. A. Flynn, R.A.M.C.
" " " "	Dr. J. S. Law, R.A.M.C. In War Hospital.
Somerset County, Cotford . .	Dr. Louis McHugh, Field Ambulance Brigade.
" " Wells	Dr. Stanley Pinion, R.A.M.C.
Stafford County, Burntwood . .	Dr. William Reid, R.A.M.C.
" " Cheddleton	Dr. William Douglas Wilkins, R.A.M.C.
" " Stafford	Dr. B. H. Shaw, R.A.M.C.
" " " "	Dr. J. W. Bennett, R.A.M.C.
Surrey, Merstham "	Dr. J. W. Crowther, R.E., killed in action, October 18th, 1914.
Sussex, East County	Dr. E. H. Walker, R.A.M.C.
Warwick County	Dr. K. Drury, R.A.M.C.
West Ham Borough	Dr. J. Harvey Cuthbert, R.A.M.C.
Wilts County	Dr. J. MacPhail, R.A.M.C.
" " " "	Dr. J. W. Leech, R.A.M.C.
Worcester Co. and City . . .	Dr. F. F. Wisely, R.A.M.C.
" " Barnsley Hall	Dr. Michl John Murray, R.A.M.C.
York, N. Riding, Clifton . .	Dr. Geo. E. Bounton, R.A.M.C.
" W. " Menston	Dr. C. J. Kelly, Army.
" " " "	Dr. G. M. Graham, Navy.
" " Wadsley	Dr. J. R. G. Garbutt, R.A.M.C.
" " Wakefield	Dr. Robinson, R.A.M.C.
" " " "	Dr. Armstrong, R.A.M.C.
" " " "	Dr. Fraser, Royal Navy.
Whittingham Asylum, Lancashire.—Attendants volunteered: R.A.M.C., 11; Army, 81; Navy, 4; unknown, 10.	

SCOTLAND.

<i>Asylum.</i>	<i>Names of Assistant Medical Officers.</i>
Aberdeen Royal	Dr. Arthur Kellas, R.A.M.C.
" " " "	Dr. J. M. H. Reid, R.A.M.C.
" City	Dr. W. H. Brodie, R.A.M.C.
Argyll and Bute District . .	Dr. Wallace M. Conley, R.A.M.C. On sick leave after enteric.
Ayr District	Dr. J. F. M. Sloan, R.A.M.C.
" " " "	Dr. J. W. Burton, R.A.M.C.
" " " "	Dr. J. Roger, R.A.M.C.
Dumfries, Crichton Royal . .	Dr. W. D. Chambers, Captain, Inniskillings.
" " " "	Dr. J. M. Moyes, R.A.M.C.
" " " "	Dr. C. J. Tisdale, R.A.M.C.
" " " "	Mr. A. O. Brownlee (Clinical Assistant), Lieut., R.F.A.
Edinb. District, Bangour Village .	Dr. Patrick Steele, R.A.M.C.
" " " "	Dr. Kenneth D. C. Macrae, R.A.M.C.
" " " "	Dr. G. van der Vyver, R.A.M.C.
" " " "	Dr. C. A. E. J. Brownlee, R.F.A.
" " " "	W. Richards, Dresser, Red Cross Hospital.
Royal Edinburgh, Morningside .	Dr. Henry Yellowlees, R.A.M.C.
" " " "	Dr. Ian C. Mackay, R.A.M.C.
" " " "	Dr. A. S. Glynn, R.A.M.C.
" " " "	Dr. F. C. Chandler, R.A.M.C.
" " " "	Dr. W. A. Coates, R.A.M.C.
" " " "	Dr. David Lennox, R.F.A.
" " " "	Dr. G. Beveridge, Army.
" " " "	Dr. S. Huddleston, Army. Killed.
" " " "	Dr. C. W. Lewis, Navy Medical.
" " " "	Dr. F. B. Eykyn, Navy Medical.
" " " "	Dr. R. E. Cameron, Navy Medical.

<i>Asylum.</i>	<i>Names of Assistant Medical Officers.</i>
Elgin District	Dr. D. G. Campbell, combatant.
Glasgow Royal, Gartnavel	Dr. Walker, R.A.M.C.
Glasgow Royal, Gartnavel	Dr. H. B. Morgan, R.A.M.C.
" "	Dr. R. S. Miller, R.A.M.C.
" "	Dr. Jas. J. Sinclair, R.A.M.C.
" "	Dr. Findlay Murchie, R.A.M.C.
" "	Dr. Alex. J. Gibson, R.A.M.C.
" "	Dr. John M. Forsyth, R.A.M.C.
" "	Dr. McEwan, R.N.R. Hospital Ship.
" "	Dr. Walter J. May, Captain Natal Carabineers.
" "	Dr. Chas. S. Black, Lieut., 6th H.L.I.
Glasgow District Hospital for Mental Diseases, Gartloch. {	Dr. Ronald Stewart, R.A.M.C.
	Dr. Robert Marshall, Civil Surgeon attached to 17th General Hospital.
	Dr. John C. M. Mathison, Argyll and Sutherland Highlanders, combatant.
Govan District	Dr. Arthur L. Taylor, R.A.M.C.
" "	Dr. Ian D. Suttie, R.A.M.C.
" "	Dr. Gavin Young, R.A.M.C.
Inverness District	Dr. J. O. Reid, R.A.M.C.
Lanark District, Hartwood	Dr. Leslie H. Skene, R.A.M.C.
" "	Dr. John M. Clarke, R.A.M.C.
" "	Dr. James Kirkland, R.A.M.C.
" "	Mr. Frank Taylor (Clinical), R.A.M.C.
Montrose Royal	Dr. Hunter, R.A.M.C.
" "	Dr. Milne, R.A.M.C.
" "	Dr. W. Legget, R.A.M.C.
Perth, James Murray's Royal	Dr. Clifford Smith, R.A.M.C.
" "	Dr. W. W. Staelchurch, R.A.M.C.
Roxburgh, etc. District, Melrose	Mr. Robert M. Hume (Clinical), R.A.M.C.
Stirling District, Larbert	Dr. Hugh N. Shaw, Surgeon, Naval Brigade.
" "	Mr. MacKay (Clinical), Lieut., Argyll and Sutherland Highlanders:
" "	Mr. W. W. Brown (Clinical), Lieut., R.F.A.

IRELAND.

<i>Asylum.</i>	<i>Names of Assistant Medical Officers.</i>
Ballinasloe District	Dr. John Mills, R.A.M.C.
Belfast District	Dr. N. B. Graham, R.A.M.C.
" "	Dr. W. Tyrrell, R.A.M.C.
Cork District	Dr. O. F. McCarthy, Navy.
Letterkenny District	Dr. J. C. Martin, R.A.M.C.
Londonderry District	Dr. Arthur F. J. Patterson, R.A.M.C.
Sligo District	Dr. Thomas Gilchrist, R.A.M.C.

[The Editors regret that, owing to press of time, they are unable to publish in this issue the numbers of attendants and nurses who have volunteered for military or naval service. They hope to do so in the next number of the Journal.]

THE JOURNAL OF MENTAL SCIENCE

[Published by Authority of the Medico-Psychological Association
of Great Britain and Ireland.]

No. 255 [NEW SERIES No. 219.] OCTOBER, 1915. VOL. LXI.

Apologia.

But, indeed, we prefer books to pounds ; and we love manuscripts better than florins ; and we prefer small pamphlets to war horses.—
ISAAC DISRAELI, 'Curiosities of Literature.'

CERTES, it is not from preference that the Editors of this Journal are presenting on this occasion only a small pamphlet for the perusal of the members of the Association in lieu of the usual October number. They find themselves the victims of necessity, and just at present it would seem easier to procure a war horse than a manuscript suitable for publication in its pages. This condition of things was not unforeseen, and in their report to the Council at the Annual Meeting in July the Editors expressed their apprehensions that a dearth of contributions would become acutely felt during the progress of the war. As most of the members are, no doubt, aware, no papers were read at the Annual Meeting, which occupied itself solely with the business affairs of the Association. Nor have any been read at any divisional meeting, so far as the Editors are aware ; none, at any rate, have reached their hands. Their forecast, therefore, has unfortunately found a literal fulfilment, and they find themselves all but empty-handed, with the scantiest material at their disposal for publication. The usual sources of this material are in fact, at the present crisis of affairs, all but dried up. In this experience, however, they are not singular, as in other countries—France, for instance—the issue of some medical

journals has had to be suspended altogether for many months. And when we consider how greatly the staffs of asylums in the British Isles have been depleted during the past year—about 180 members of the medical staffs and some 3,000 of non-medical asylum employes having joined one or other of the Services—it need engender no surprise if, as a result, research work should have practically come to a standstill, and the flow of contributions have been abruptly checked. Those of our asylum colleagues who are still in charge have more than enough to occupy them in purely administrative work.

Under these circumstances it has been considered advisable to limit the current issue to records of business matters alone, and to reserve the few small literary items at present in the hands of the Editors for the January number, in the hope that some additions may be made to these before the time of its publication, so that we may not again have to offer to the members, as an apology for a journal of ordinary size, a mere tract of such slender dimensions as in the present instance. As long, however, as the war continues we feel that we can hardly expect to receive more than a fractional amount of material for publication as compared with what is usually available under normal conditions.

Notes and News.

MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND.

ANNUAL GENERAL MEETING.

THE SEVENTY-FOURTH ANNUAL GENERAL MEETING was held at the Society's rooms, 11, Chandos Street, London, W., on Thursday, July 22nd, 1915, Dr. David G. Thomson, President, in the Chair.

There were present: Sir George Savage, and Drs. T. S. Adair, Fletcher Beach, D. Bower, J. Chambers, R. H. Cole, M. A. Collins, H. Corner, M. Craig, W. R. Dawson, T. Duff, T. Drapes, J. H. Earls, J. W. Geddes, J. R. Gilmour, H. E. Haynes, T. B. Hyslop, G. H. Johnston, N. T. Kerr, R. Langdon-Down, N. Lavers, H. Wolseley-Lewis, A. Miller, A. Neill, W. F. Nelis, H. H. Newington, H. J. Norman, D. Orr, J. Porter Phillips, W. Samuels, J. N. Sergeant, R. P. Smith, J. G. Soutar, R. H. Steen, J. Stewart, F. R. P. Taylor, T. S. Tuke.

Present at Council Meeting: Dr. David G. Thomson (President) in the Chair; Drs. James Chambers, H. Hayes Newington, M. A. Collins, J. N. Sergeant, T. S. Adair, H. Wolseley-Lewis, R. H. Cole, J. G. Porter Phillips, Alfred Miller, Thomas Drapes, T. Seymour Tuke, J. R. Gilmour, N. T. Kerr, E. D. O'Neill, W. R. Dawson, J. G. Soutar, and R. H. Steen (Acting Hon. Sec.).

The following sent communications expressing regret at their inability to be present:

Drs. C. C. Easterbrook, G. D. McRae, L. R. Oswald, G. M. Robertson, T. E. K. Stansfield, R. B. Campbell, John Keay.

MINUTES.

The PRESIDENT said the minutes of the last annual meeting had duly appeared in the Journal; he therefore asked whether the meeting would accept them as read.

This was agreed to, and the minutes were signed.

ELECTION OF OFFICERS AND COUNCIL.

Dr. HAYES NEWINGTON, at the request of the President, explained what had been suggested in this matter. He said the motion he had to submit resolved itself to a great extent. He believed it had been the custom of all learned societies, under the circumstances at present existing, to abstain from electing fresh officers for the present year of war, but, instead, to continue in their offices those who were the present holders. As one who did not come and go as others did, he, the speaker, had been asked to move a resolution to the effect that officers now in office be continued in their office until the date of the next annual meeting.

Sir GEORGE SAVAGE said he had much pleasure in seconding it.

Carried.

The PRESIDENT said it was necessary to notice that there was a certain exception to the foregoing resolution, namely, that nominated members of the Council must be elected by this meeting; they were not at present in existence as members of the Council, hence they must be elected. He nominated as scrutineers for this function Drs. Sergeant, Norman, Haynes, and Gilmour. During the balloting he wished to make a proposal which he was sure would meet with an immediate and enthusiastic response from those present, namely, that the congratulations of the Medico-Psychological Association should be conveyed to Sir Frederick Needham, a member of the Board of Control, a former President, and now an honorary member of the Association, on the occasion of the honour which had been conferred on him by His Majesty the King.

The resolution was carried by acclamation.

Dr. HAYES NEWINGTON pointed out that his resolution dealt only with the officers, and did not include standing committees.

The PRESIDENT said it was also necessary at this meeting to elect the auditors afresh; they were elected annually, on the nomination of the Council. Last time Dr. Bower and Dr. Percy Smith were the auditors, and they were kindly willing to continue the office for another year.

These gentlemen were duly re-elected.

The PRESIDENT said that, in reference to the standing committees, there were few or no alterations, but the members of them must be formally put from the Chair. It was open to any member to suggest additional names, or substituted names, for any gentleman mentioned.

Carried.

The scrutineers reported that the officers and Council had been re-elected unanimously.

REPORT OF THE COUNCIL.

Dr. R. H. STEEN (Acting General Secretary) read the Report of the Council as follows:

The number of members—ordinary, honorary, and corresponding—as shown in the list of names published in the *Journal of Mental Science* for January, 1915, was 731, as compared with 747 in January, 1914. This decrease of 16 is confined to the ordinary members, the number of corresponding and honorary members remaining unchanged.

The following table shows the membership for the past decade:

Members.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.	1914.
Ordinary . . .	641	638	645	652	673	680	690	696	695	679
Honorary . . .	32	32	30	29	32	33	34	35	34	34
Corresponding . .	15	15	15	15	17	17	19	19	18	18
Total . . .	688	685	690	696	722	730	743	750	747	731

The increase during the period is therefore 43, of whom 38 are ordinary members.

The number of new members elected and registered during the year was 31, a decrease of 6 on the previous year. The names of 3 members which had been removed were restored. Twenty ordinary members resigned, and the names of 22 were removed by the Council under Bye-law 17, owing to arrears of subscriptions.

With regret it is necessary to report the deaths of 8 members, one of whom, Dr. S. N. Crowther, was killed in action.

Since the publication of the current list the Association has had to deplore the death of Sir Thomas Clouston, a past president and member for 53 years.

The honour of knighthood has been conferred upon Sir Frederick Needham, an honorary member, and former president of the Association.

The Annual Meeting, held in Norwich, was very successful. Many interesting papers were read and discussed.

The Committee *re* Status of British Psychiatry and of Medical Officers presented a lengthy and valuable report, which was fully discussed.

The thanks of the Association are due to the President for the trouble taken to make the visit to Norwich and its neighbourhood an enjoyable one. Dr. and Mrs. Thomson kindly entertained the Association at a garden party. Thanks are also due to the Chairman and Visiting Committee of the Norfolk County Mental Hospital, who kindly received the Members of the Association as their guests at luncheon in the Great Hall of the Institution, and to the Corporation of Norwich for the use of the Guildhall for the meetings.

The quarterly meetings were held in November and May in London.

Owing to the war none of these meetings had their usual festive accompaniments, and for the same reason the February meeting, which usually takes place at a provincial centre, was held in London.

Two Special Meetings were held on August 25th and September 22nd for the purpose of altering Bye-law 102.

Many of the members of the Association have joined the forces of the Crown for the duration of the war, and the Association records with pride the valuable work done by its members in arranging for the reception of the wounded in various asylums.

The Parliamentary and Educational Committees have met regularly. Both these committees present reports.

During the year the Research Committee has been formed. The Annual Report of its work has been circulated.

The Bronze Medal for 1914 was presented to Dr. Wootton, and the prizes for papers read at Divisional Meetings were awarded to Drs. Eager and Macphail.

The entries and results of the Nursing examinations have been as follows: *Final*—Entered in November, 156; successful, 100; excellent, 8. *Preliminary*—Entered in November, 270; successful, 160. *Final*—Entered in May, 425; successful, 282; excellent, 8. *Preliminary*—Entered in May, 894; successful 606.¹

¹ N.B.—The figures for May as given above differ somewhat from those given in the Report of Council, as the results of the examination of South African candidates were not known at the time the Report was written. These have since come to hand, and the above figures are correct, as supplied by the Registrar.—ED.

The Journal, as judged by its satisfactory circulation, continues to be much appreciated.

Divisional Meetings have been held with good attendances, and the membership reported to the Council in May was as follows:

South-Eastern	250
Northern and Midland	155
South-Western	100
Scottish	94
Irish	53

Thanks are due to the Treasurer, Registrar, and Divisional and Committee Secretaries for their work so willingly given to the Association.

The President (Dr. D. G. Thomson) has presided over the meetings with dignity and courtesy.

The PRESIDENT proposed the adoption of the Report, and it was agreed to.

SPECIAL BUSINESS REFERRED FROM COUNCIL MEETING.

The PRESIDENT said two resolutions came before that day's Council meeting from the Parliamentary Committee, and both were approved by the Council. The sanction of this general meeting was now required. The first of these resolutions ran as follows: "That this Committee ask the Council to request the Board of Control to endeavour to obtain the exemption of attendants and male employés in institutions for the insane, and in those for the mentally defective, from the provisions of the National Registration Act, 1915." This would be disposed of first.

Dr. J. G. SOUTAR said he had pleasure in moving the resolution which the President had just read. It was proposed at the Parliamentary Committee, who approved it, and passed it on to the Council. That body also approved it, and it now came before the general meeting for confirmation or rejection. The idea underlying the resolution was simply that the asylum services generally were now so pressed for want of attendants that, if fresh pressure were put upon them, and there resulted a further diminution in the number of attendants, then many of the institutions would become unworkable. The loyalty and patriotism of asylum workers throughout the country did not require any defence; it was never in doubt; they had sent out a large quota of men to the ranks, and work in many other directions had been done by the asylums which had been of the greatest possible service to the nation at this crisis. It was only necessary to refer to what had already been mentioned in the Report, the really wonderful work which had been done by the asylums in making provision for the wounded in many parts of the country. And a further call had been made on the work of asylums in this way, in that the war was, itself, increasing the amount of insanity among the people. In both the public and the private asylums there had been recently arriving some of the fruits of the terrible strain to which many had been subjected, and it was felt that a further diminution of the staffs would mean that the asylums could not continue to do that effective service which was demanded of them at the present time. If it would be possible to obtain exemption for the staffs from the registration now contemplated, it seemed to be the best way of dealing with the difficulty. It was quite true that mere registration did not involve the removal of men from the service, but he thought it was just as well that the Association should take its step immediately, and let the authorities understand that the Association did feel the difficulty, and wished to bring it to their notice. If that exemption from registration could not be secured, the Association would still be in a position to make a further claim for exemption from service for men engaged in asylums.

Dr. M. ABDY COLLINS seconded.

The PRESIDENT invited the expression of views from members.

Dr. F. R. P. TAYLOR said he was very glad this matter had been brought before the meeting, as he knew it was one which had been agitating the minds of staffs considerably. During the last few days several of his charge-attendants had come to him to ask what was to be done when they got this National Register; and he replied that it was a matter which he would probably have to bring before the Committee, as to how it should be filled in. He was, therefore, very glad the Association had taken the question up. He felt himself to be in entire agreement with Dr. Soutar that, if more of the men employed in asylums were to be taken, it

would be almost impossible, owing to the overcrowded state of the asylums and the inexperience of the staffs, to carry on the work without some accidents.

Dr. HAYES NEWINGTON wished to point out that the new registration requirement was an even greater threat than conscription would be. As Dr. Soutar said, it was wise to take this matter in hand at once, although really no great objection could be taken to registration in itself, any more than to the taking of an ordinary census. But in the case of the people whose services were sought by the Government, it was not merely a question of patriotism. If conscription were operative, everybody would be liable to serve, and only a certain proportion would come from the asylums. There would be many shirkers and skulkers outside asylums who, under conscription, would be liable to serve. He felt sure that if any asylum employé desired to join the colours and fight, all would wish him God-speed. But under registration it was a different matter, for people were invited to put their names down for working at trades which might prove more lucrative to them than their present posts. Therefore it was not simply a question of patriotism, but of self-advancement, and the receipt of higher rates of pay. Under those circumstances he thought it would be well if the selection for such work, as regards asylum staffs, should be limited, if possible, so that the important quasi-State duty of caring for the insane should not be injured.

Dr. GEDDES (Middlesbrough) thought there would be no great harm in allowing the process of registration to apply to asylum staffs. Dr. Soutar admitted that registration did not necessarily mean that asylum staffs would be further depleted. He, the speaker, thought it would be a mistake to oppose this registration. At Middlesbrough Asylum there had been as much difficulty as at others in getting suitable attendants. Still, the resolution just proposed had come somewhat as a surprise to him. He had had talks with numbers of his attendants, and he wanted to keep the older and more experienced members of his staff. They asked him whether they should be given to wear a badge of service. He wrote to the Board of Control on the subject, and the reply he received was that the matter was being discussed with the War Office. That was some weeks ago, since when he had not heard anything further. He would be glad if Dr. Steen could tell the meeting whether anything more had been done in the matter. He did not propose to move any amendment.

The resolution was carried, with three dissentients.

The PRESIDENT replied to Dr. Geddes' question that nothing had been done in reference to a badge.

Dr. WOLSELEY LEWIS proposed: "That the question of employing on Government work patients, and those in charge of them, in institutions for the insane, should be recommended to the favourable consideration of the Board of Control." He said that he, like his friend Dr. Taylor, had been asked by several members of his staff as to how they should fill in the National Register inquiry; and he had felt, just as the majority of the meeting evidently felt, that it would be impossible, in large institutions, having regard to the care of the patients, to allow any more members of the staff to leave than had already gone. He had lost 50 *per cent.* of his staff, and he thought it was largely the case also with most large institutions. But he thought there still remained on the staffs a large number of patriotic people. A large number of the patients were also very patriotic, and would be very glad to do any work they could to help the country at the present time. And he thought it would be some satisfaction to both the patients and the staff in large institutions if the Government were to arrange for them to do some definite work to forward the cause of the country at the present moment. The only way in which that could be secured was through the official Government Department, the Board of Control; the Government knew what work was wanted, the Board of Control knew what work the asylums were capable of; and if a suggestion of this kind were conveyed to the Board of Control, it was very likely that it would be acted upon, and that the asylums would be definitely asked to do some work for the war.

Dr. ADAIR said he had much pleasure in seconding the resolution. He thought the matter was well worth the consideration of the Board of Control, particularly as he had had applications from his patients asking whether they might do some work in a small way. If the Board of Control would give some advice as to how to proceed, some useful work would very likely be the outcome.

The PRESIDENT invited expressions of opinion on the resolution.
It was unanimously carried.

REPORT OF THE TREASURER.

Dr. HAYES NEWINGTON said he believed every member of the Association had in his hands the Treasurer's Report and Balance Sheet. Unfortunately, the rules prescribed that the Report of the Treasurer should be taken before that of the Auditors, though it should be the other way about, for then the Treasurer would have an opportunity of replying to any remarks of the Auditors. He would have to anticipate some of the things they might be going to say. He wished to point out that the Association had a large gross balance of £488, as against a gross balance of £222 a year before. Unfortunately, by a clerical error, the cost of the printing of the Journal for one quarter was taken out of last year and put into the year before, so that the cost of the Journal for 1913 was shown as £586, when it only cost £343. The transfer of the item to the proper year would bring the accounts more into consonance. Adding the two balances together and dividing by two, gave a product of about £365. The balance was, of course, a very large and satisfactory one, and it was largely due to the economy of the officers, and the way in which the Journal and other money-getting agencies were worked and administered. Last November, by the desire of the Council, he invested £500 in the old War Loan, and when the new War Loan was produced recently, at short notice, he communicated with the President asking his presidential permission to take steps to invest another £500. That was done and carried through; and they now had the option of converting the old £500 loan into the present War Loan; and that would be attended to. He moved the adoption of the Report.

Dr. PERCY SMITH seconded.

The PRESIDENT remarked that the Treasurer's Report was a most satisfactory one.

Carried.

REPORT OF THE EDITORS.

Dr. DRAPES presented the Report of the Editors :

For reasons which will be obvious after the reading of this Report, and which are connected with present and prospective difficulties, it will extend to a somewhat greater length than usual.

The Journal has, we trust, during the past year maintained its standard of interest and value as regards the various articles which have appeared in its pages. As is the case in many other quarters, it has felt the pinch of the war, and, as seen by the Treasurer's accounts, the sales show a falling off of £30 as compared with those of the previous year. This deficit, we have been informed by the publishers, has been due wholly to the war, and the consequent reduction in the number of foreign subscribers, which was, of course, to be expected. We can only cherish the hope that, when the great tragedy is over, there may be a gradual return to the *status quo ante*, and that the medical men at least, in those European countries which are at present engaged in a life and death struggle, will favour the re-establishment of an *entente* amongst those who have similar objects at heart—the pursuit of science and the relief of human suffering.

The cost of the Journal for the calendar year 1914 was £415 5s., or £7 7s. less than for the previous year; but this, of course, fluctuates according to the amount of printed matter, number of illustrations, etc. The numbers of copies printed since the year 1911 has been 1,125 of each issue.

The present (July) number has had to be brought out under rather exceptional difficulties. Owing to Horton Asylum having been converted into a war hospital, with Doctor (now Lieut.-Colonel) Lord as Officer in Charge, the Journal has been, for the time being, deprived of the invaluable services and leadership of its chief editor, a loss which could hardly have failed to make itself more or less acutely felt. There was also in some sections, owing in great part to the war, a serious reduction in the amount of material available for publication. Of this a good deal reached the hands of the remnant of the editorial staff as it were at the eleventh hour, which led to regrettable but unavoidable delay in the issue of the Journal.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION.—For the Year 1914.

REVENUE ACCOUNT—January 1st to December 31st, 1914.

1913. £ s. d.	Dr.	Expenditure.	£ s. d.	£ s. d.	Income.	£ s. d.	Gr. £ s. d.	1913. £ s. d.
506 12 11	To Journal—Printing, Publishing, Engraving, Advertising, and Postage	...	343 19 7	...	By Dividends	...	68 18 9	£ s. d. 63 16 8
356 3 5	" Examinations, Association Prizes, and Clerical Assistance to Registrar	...	411 16 9	...	" Sale of Journal	...	...	210 0 0
41 9 5	" Petty Disbursements, Stationery, Postages, etc.	...	52 7 7	...	" Handbook	...	30 15 10	29 5 0
152 15 6	" Annual, General, and Divisional Meetings	...	128 12 11	...	" Statistical Forms, etc.	...	28 14 3	...
103 2 0	" Rent of Premises at 11, Chandos Street, care of Office, etc.	...	103 12 0	...	" Advertisements, etc.	...	21 12 4	39 19 9
8 8 0	" Audit and Clerical Assistance	...	8 8 0	...	" Fees, Certificates of Psychological Medicine	...	201 2 5	...
107 14 11	" Miscellaneous	...	123 8 11	...	" Certificates of Proficiency in Nursing	...	13 13 0	25 4 0
30 15 1	" Library Account	...	11 19 0	...	" Subscriptions	...	500 3 6	492 8 3
1387 1 3				1184 4 9			708 12 0	750 4 6
223 16 11	Balance	...	...	488 4 11			...	...
1610 18 2				£1672 9 8			£1672 9 8	£1610 18 2

BALANCE-SHEET—31st December, 1914.

1913. £ s. d.	Liabilities.	£ s. d.	£ s. d.	Assets.	£ s. d.	£ s. d.	1913. £ s. d.
109 6 2	To Journal Account, balance of	...	2 2 0	By Lloyd's Bank:—Bankers	...	...	£ s. d. 535 37 4
52 1 0	" Examinations Account, balance of	...	95 13 10	" Stocks, value at this date:	...	...	...
0 2 11	" Petty Disbursements Account, balance of	...	19 11 2	" New Zealand, 3½ per cent.	...	...	273 13 0
22 0 3	" Meetings Account, balance of	...	16 2 11	Do.	...	...	282 4 11
25 18 0	" Rent, etc., balance of	...	25 18 0	Victoria, 3 per cent. (Hack Tuke Memorial)	...	...	78 11 1
26 2 6	" Miscellaneous Account, balance of	...	21 1 3	Do.	...	...	181 13 6
31 6 6	" Gaskell Fund, Dividends	...	81 18 11	Manchester Corporation, 3 per cent.	...	...	171 2 6
266 17 4	" Library Account, balance of	...	2 9 7	New South Wales, 3½ per cent.	...	...	174 4 4
			264 17 8	Midland Railway Preference, 2½ per cent.	...	...	300 1 6
				New South Wales, 3½ per cent.	...	...	178 18 5
				Midland Railway Preference, 2½ per cent.	...	...	286 8 10
				New Zealand, 3½ per cent.	...	...	...
				War Loan	...	...	...
	Balance.—Balance on 1st January	...	2463 5 2		...	...	...
	Add: Balance of Revenue Account	...	488 4 11		...	...	...
			2951 10 1		...	...	...
	Deduct:				...	...	...
	Decrease in Value of Stocks	...	51 10 9		...	...	...
	Subscriptions written off	...	69 6 0		...	...	...
			120 16 9		...	...	...
2463 5 2			2830 13 4		...	...	...
£2730 2 6			£3095 11 0		...	...	...

(Signed) H. HAYES NEWINGTON, TREASURER.
(Signed) WOODINGTON & BOLT, C.A.

DAVID BOWER } AUDITORS.
R. PERCY SMITH }

For these reasons it is to be hoped that members will put a charitable construction upon its late appearance, which was not due to editorial dilatoriness, but to the exigencies of circumstances.

Owing to the fact that no papers are being read at the Annual Meeting, and that it is not unlikely that there will be a similar experience at a good many, if not all, of the divisional meetings, we have to face the probability of there being an exceptional dearth of material during the ensuing year, with, possibly, a necessity for abandoning the issue of one or more quarterly numbers. Any members, therefore, who contemplate sending in contributions during the continuance of the war, are requested to kindly forward them at as early a date as possible in order that the Editors may be in a position to decide whether they will have sufficient material in their hands to justify the publication of the Journal for any particular quarter in its usual form, or whether the issue will have to be limited to the publication of purely business matters of the Association.

Our thanks are due, and gratefully offered, to Dr. Chambers for his kind help and advice in a time of difficulty.

JOHN R. LORD, M.B.
LEWIS BRUCE, M.D.
THOMAS DRAPES, M.B.

It was agreed to.

REPORT OF AUDITORS.

Dr. PERCY SMITH submitted the following Report:

We beg to report that we have examined the Treasurer's accounts and vouchers for payments made on behalf of the Association for the year 1914 and find them perfectly accurate. The Treasurer has pointed out to us that the large balance, £488 4s. 11d., shown on the year's working is accounted for by the fact that only three of the quarterly payments for printing the Journal appear in the accounts for 1914. The other quarterly payment was, by a clerical oversight, charged in the 1913 account, the balance of which should have been increased by a corresponding amount. This in no way alters the financial position of the Association at the end of the year, which appears to be thoroughly sound. We are glad to see that £500 of the War Loan Stock of 1914 was taken up. We regret to find that a sum of no less than £69 6s. had to be written off for non-payment of subscriptions, and that 154 guineas were still owing to the Association by members on December 31st, which is far too high an amount, although slightly less than that of the previous year.

We would like to express our high opinion of the manner in which the accounts of the Association are kept by the Treasurer and his assistants, and the evidence of economy and efficiency exercised by the various executive officers of the Association which is shown by inspection of the books and vouchers.

DAVID BOWER.
R. PERCY SMITH.

Dr. BOWER seconded, and it was carried.

REPORT OF EDUCATIONAL COMMITTEE.

During the past year this Committee has met on four occasions. Five candidates presented themselves for the Professional Certificate Examination, and four passed. One candidate presented himself for the Gaskell Prize and Gold Medal, but no award was made, as he failed to satisfy the Examiners. A Bronze Medal for an essay has been presented to Dr. J. C. Wootton, Cane Hill Asylum.

It is gratifying to report that during the year there has been a very satisfactory number of entries for the Nursing Certificate Examination from the colonies.

It has been resolved that the Professional Certificate Examination be held twice yearly.

A Sub-Committee, appointed to deal with the question of teaching for and the granting of a Certificate to those employed under the Mental Deficiency Act, has met during the year, and it has been decided that owing to the undeveloped condition of the administration of the Mental Deficiency Act it was inadvisable at the

present time to make any recommendations. The matter will receive further attention in due course.

MAURICE CRAIG, *Chairman*.

J. G. PORTER PHILLIPS, *Secretary*.

Dr. PORTER PHILLIPS said the Report of the Educational Committee had already been printed and distributed amongst the members, but he had now a few additional facts to report concerning the entrants for examination. With regard to the Nursing Certificate Examination, the Registrar reported that for the Preliminary in November 270 entered, and of those 160 passed. For the Final Examination there were 156 entrants, and 100 passed. In May last, for the Preliminary Examination there were 894 entrants, and 571 passed.¹ There were three essays sent in for competition for prizes. The first prize, of £10, was awarded to Dr. G. Dunlop Robertson (Hartwood) and the second prize to Dr. Maxwell Ross (Morningside). With regard to the Professional Certificate Examination and Gaskell Prize Competition, these had not been held this year. Those were the additions to the Report as printed, and unless it was desired he did not propose to read the Report in full. He moved its adoption.

The PRESIDENT asked whether any member wished to hear further particulars as to the alteration in the wording of the Certificate.

Dr. PHILLIPS said that with regard to the Certificate issued in the case of the Preliminary Examination to the successful candidates, it was discussed at the meeting of the Educational Committee, two meetings ago, and it appeared that use had been made of the Preliminary Examination Voucher or Certificate for obtaining situations, misleading prospective employers into the belief that the applicant possessed the Certificate of the Medico-Psychological Association. The discussion eventuated in the suggestion that the Certificate should be re-modelled, so that in future it would take the form of a notice only. The suggestion was that the name, number, and date should be inserted, and should say: "This is to give you notice that you have passed the Preliminary Examination for the Certificate in Nursing of this Association, and will, after completing the training required by the Regulations of this Association, be eligible to enter for the Final Examination for the Nursing Certificate. Signed —, Registrar." And the words were added: "This Notice must be retained by you, and returned to me with the Schedule when you enter for the Final Examination." This re-modelled notice had been sent to the Council, with the view to its being adopted in the future, in lieu of the late form of certificate.

Dr. TAYLOR seconded the motion for the adoption of the Report, and it was carried.

REPORT OF THE PARLIAMENTARY COMMITTEE.

Your Committee has met three times during the year, and has had under discussion the following subjects: The Scottish Royal Asylums and Superannuation, Legislation to promote Scientific Research in Asylums, and the Staffing of Asylums in the event of conscription being adopted.

The Voluntary Mental Treatment Bill has been considered. This Bill and the Asylums Officers (Employment, Pensions and Superannuation) Bill, the Nurses' Registration Bills, and the Inebriate Bill, have made no further progress, owing to the war, nor is the time opportune to press for fresh legislation.

H. WOLSELEY-LEWIS, *Chairman*.

R. H. COLE, *Secretary*.

Dr. R. H. COLE moved the adoption of this Report, which had already been circulated, so that there was no necessity for him to refer to it in detail. Three meetings had been held, and a considerable amount of work was done. The result of that day's meeting had already been referred to in the resolutions submitted.

Dr. BOWER seconded the motion. In reply further to Dr. Geddes about the badge, this matter came up before the Parliamentary Committee and was dis-

¹ See foot-note to Report of Council, p. 504.

cussed by them, but it was thought better to postpone action until the result of the resolution sent forward had been seen. If that were accepted the badge would be a much more valuable one.

Carried.

REPORT OF THE LIBRARY COMMITTEE.

The Library has been much used by members, and a considerable number of books has been added. The annual grant of £20 is asked, and members are invited to examine their own bookshelves with a view to presenting the Association with books which they can spare, and which may enhance the value of the Library.

T. B. HYSLOP,

Member, Library Committee.

Dr. R. H. COLE, in the absence of Dr. Hyslop, presented this Report and moved its adoption. He added that Dr. Hyslop himself had set a good example by presenting to the Library a good number of books, as members were aware; and it was perhaps open to others to do likewise. It was scarcely necessary to mention how anxious the Secretary was to send books out to country members if they would only apply to him; to ensure getting the book they need only send three penny stamps. Even if the required book was not in the Library, it could be secured from Messrs. Lewis, to which establishment the Association subscribed.

Dr. ADAIR seconded.

Dr. SOUTAR asked whether, if this resolution were passed in its present form, it meant that £20 would be granted to the Library.

The PRESIDENT replied that motions involving the expenditure of funds would come up afterwards.

Dr. M. A. COLLINS thought the reference to the gift of books by Dr. Hyslop, which Dr. Cole spoke of verbally, might be included in the Report, even though Dr. Hyslop himself was a signatory of that Report.

Dr. DRAPES pointed out that the reference to the gift appears in the July number of the Journal.

The motion was carried.

REPORT OF THE RESEARCH COMMITTEE.

Dr. DAVID ORR read the Report as follows.

The Research Committee begs to report that it was constituted by the Council of the Association on November 24th, 1914, with the following membership: Drs. T. Stewart Adair, J. Shaw Bolton, J. Chambers, H. Devine, T. Drapes, E. Goodall, J. R. Lord, Ford Robertson, R. G. Rows, R. Percy Smith and W. J. Tulloch, the President (Dr. D. G. Thomson), and Secretary (Dr. M. A. Collins) of the Association.

At its first meeting, held on February 18th, 1915, Dr. R. Percy Smith was elected Chairman, Dr. R. G. Rows Secretary, Drs. H. F. Hayes Newington and David Orr were co-opted as members of the Committee.

The letters of Dr. T. W. McDowall to the Secretary of the Association (dated April 27th, 1914) and to the Secretary of the Board of Control (dated April 2nd, 1914) were considered, and the following resolution was adopted:

"That the Research Committee approve the principle contained in the letters of Dr. T. W. McDowall, and ask the Council to direct the Parliamentary Committee to further legislation, when such is possible, to allow of conjoined expenditure on Research by local authorities governing public asylums."

It was further resolved:

"That the Research Committee ask the Council whether it would be willing to make grants in aid of original work on the recommendation of this Committee."

The Committee met again on May 18th, 1915. Dr. David Orr was appointed joint Secretary of the Committee with Dr. R. G. Rows, and it was resolved that on the presentation of the Report of the Committee to the Annual Meeting of the Association the following resolution should be moved by the Chairman:

"That the Association empowers the Council, should it think fit, to make grants in aid of original research on the recommendation of the Research Committee."

It was decided to postpone further discussion *re* Research until after the Annual Meeting of the Association.

R. PERCY SMITH, *Chairman*.

D. ORR, *Acting Honorary Secretary*.

Dr. DAVID ORR moved that the Report be adopted.

Dr. PERCY SMITH seconded. He said that the Research Committee, at its meeting, asked the Council whether it would be willing to make grants in aid of original work, on the recommendation of this Committee; that the Council afterwards expressed its approval, and the matter would come up as a separate resolution under letter (e) on the agenda.

The motion was carried.

MOTIONS INVOLVING EXPENDITURE OF FUNDS.

The PRESIDENT invited Dr. Percy Smith to proceed with item (e) forthwith, as there were no reports under (d).

Dr. PERCY SMITH said the resolution on the agenda for the consideration of the general meeting ran: "That the Association empowers the Council, should it think fit, to make grants in aid of original research on the recommendation of the Research Committee." He said it was felt that, assuming there were any funds and that research was going on, it was desirable to support the Committee without having to wait for an annual meeting—which might be several months distant—to obtain the sanction to spend funds, as required by the regulations. Therefore what was sought was to give to the Council plenary power to make grants in aid of research, and with that object he moved the resolution. He gathered that in the immediate future there would not be much available in the way of funds for the actual work of research; but something might arise under this head, and it would be a great convenience to have power to grant help in this way.

SIR GEORGE SAVAGE seconded the motion with great pleasure.

The PRESIDENT asked whether any member had anything to say on the resolution.

Carried.

Dr. R. H. COLE moved that the sum of £20 be granted for the Library. That Committee was very economical, and did not spend all its money unless that was absolutely necessary. This grant was to enable the Committee to purchase fresh books, and to prevent books getting into a shabby state.

Dr. BOWER seconded the motion, and it was carried.

DATES OF MEETINGS.

The PRESIDENT pointed out that the date of the Northern and Midland Division should be October 7th, not the 17th as printed. The dates on the agenda were otherwise agreed to. (See notices of meetings, p. 522.)

CANDIDATES FOR ORDINARY MEMBERSHIP.

The PRESIDENT nominated Dr. Soutar and Dr. Orr as scrutineers.

The following gentlemen were unanimously elected *en bloc*:

INGALL, FRANK ERNEST, F.R.C.S.Eng., L.R.C.P.Lond., D.P.H., Tue Brook Villa, Liverpool.

Proposed by Drs. J. Kennedy Will, Charles C. Easterbrook, and C. J. Tisdall.

STEWART, A. H. L., M.R.C.S., Assistant Medical Officer, District Asylum, Melton.

Proposed by Drs. James R. Whitwell, J. Waters, and F. Oswald Spensley.

The PRESIDENT said he was sorry that the two gentlemen—who hailed from north of the Tweed—named as prize-winners had not been able to attend.

THANKS TO THE PRESIDENT AND OFFICERS.

Sir GEORGE SAVAGE proposed that a very hearty vote of thanks be accorded to the President and the other officers for their work during the past year. It was felt that the President, living a long way from London, had been a most conscientious

tious and devoted officer, and that he should, under the stress of war and other things, accept the onerous duty for another year was more than praiseworthy; and when members remembered that the President came from a dangerous district, and that if a hostile landing took place it would be in his neighbourhood, it was felt that a still greater debt of thanks was due to him. It was unnecessary to point out what the President had done, nor need he say that Dr. Thomson would be quite prepared to do as much again. Therefore he (the speaker) only expressed the feeling of those present in saying they thanked the President for what he had done, and for what he was going to do. He coupled with that vote the names of his co-officers.

Dr. JAMES STEWART expressed his pleasure, as an old member, in seconding the motion. From his contact with medical superintendents and other members of the Association he knew that the work of the organisation had been exceptionally heavy, and it promised to be still more so in the coming year. Therefore, hearty thanks were due to the President and officers, especially as they were willing to continue in office.

Carried.

The PRESIDENT, on behalf of his colleagues and himself, wished to thank Sir George Savage for the kind and happy words in which he had proposed this vote of thanks, and the meeting for so heartily carrying it. These were trying times, no doubt, and perhaps exceptionally so in the East of England. They were in a living darkness all night, and Zeppelins and other horrors passed over his house frequently. The actual work of the Executive, so far as the President was concerned, was light; he was, at least at present, more of a figure-head; but his fellow-officers must appreciate very much indeed the recognition which had been passed on their hard work for the Association.

IRISH DIVISION.

THE SUMMER MEETING of the Irish Division was held on Thursday, July 1st, 1915, at Mullingar Asylum by the kind invitation of Dr. Gavin, who had arranged for a most enjoyable motor drive for the members, previous to the meeting, to the ancient and interesting Abbey of Fore.

Members present: Drs. Dawson, Greene, Rainsford, J. O'C. Donelan, O'Neill, Kirwan, Gavin, Dillon, M. Nolan, Wallace, and Dr. Leeper (Divisional Secretary).

Letters of apology for unavoidable absence were read from Drs. Considine, Drapes, Hetherington, R. Revington, Lawless, and Lieut. James Parker, R.A.M.C.

Dr. Dawson having been moved to the chair, the minutes of the previous meeting were read and signed.

A letter was read from Miss Lentaigne thanking the members of the Irish Division for their resolution of sympathy with the family of the late Sir John Lentaigne in their recent great loss; and was ordered to be placed on the minutes.

A suggestion was made by Dr. Nolan that the staffs of Irish asylums be asked to subscribe to a fund to be raised for the purchase and equipment of an ambulance for the Irish regiments now serving at the Front. The suggestion was most favourably received by all present, but after a full discussion it was decided that as the staffs of the Irish asylums had already contributed very generously to the "Red Cross" and "Belgian Relief" Funds it would be unwise to proceed with the matter at present.

A resolution of thanks to Dr. W. Gavin for his generous hospitality, and for the very enjoyable day he had given to all the members present, was passed with acclamation.

This terminated the proceedings.

ASYLUMS ROLL OF HONOUR.

The following additional names of asylum medical officers who have joined the R.A.M.C. are taken from returns received since the July number of the Journal was issued.

Metropolitan District Asylum, Leavesden	Dr. A. MacNab, London Scottish: killed in action.
	2nd Asst. Med. Off. D. W. Griffith.
	3rd Asst. Med. Off. Dr. T. W. S. Hills.
	Temp. Med. Off. Dr. J. E. Davies.
	Temp. Med. Off. Dr. W. E. Griffith.
Horton County Asylum . . .	Temp. Med. Off. Dr. A. R. Muir.
	Temp. Med. Off. Dr. K. Maclachlan.
Prestwich County Asylum . . .	Asst. Med. Off. Lieut. D. O. Riddell, M.B.
	Asst. Med. Off. Lieut. R. M. Stewart, M.B.
	Asst. Med. Off. Lieut. E. Montgomery, F.R.C.S.I.

Omitted through oversight in July list: Dr. M. Mann Rodger, 2nd Asst. Med. Off., Cardiff Mental Hospital; Dr. F. E. Stokes and Dr. P. Cagney, Asst. Med. Offs., Portsmouth Borough Asylum.

ERRATA IN PREVIOUS LIST.

On p. 498, in the line immediately following Derby Borough the word "Devon" before "County" was omitted; Drs. W. Eager and C. F. Bainbridge being on the medical staff of Devon Asylum.

The initials of Dr. Davis, Med. Supt. of Devon Asylum should be A. N., instead of A. U., as on p. 497.

TABLE SHOWING THE NUMBERS OF THOSE ON THE STAFFS OF ASYLUMS IN THE UNITED KINGDOM, EXCLUSIVE OF MEDICAL OFFICERS, WHO HAVE JOINED THE MILITARY OR NAVAL SERVICES DURING THE PRESENT WAR UP TO THE MIDDLE OF JULY, 1915.

N.B.—All asylum employes, whether attendants, artisans, or others, are included.

Under the heading "Army" are comprised only two divisions: (1) Medical, including those attached to the R.A.M.C., Field Ambulance, etc., or retained as attendants or nurses in the newly constituted "war hospitals," or base hospitals, or others in immediate connection with our fighting forces at the theatre of war; and (2) departments other than medical, including Regulars, Territorials, Veterinary, Reserve, etc. The letters W.H. denote War Hospital.

County and borough asylums.	Male staff.			Female staff.
	Army.		Navy.	
	Medical.	Other depart- ments.		
ENGLAND AND WALES.				
Beds, Herts, and Hunts County.	2	34	1	1 (Military Hospital, Portsmouth)
Berks County . . .	—	20	1	—
Brecon County . . .	14	2	—	—
Brighton Borough . . .	2	27	1	—
Bristol Borough: W.H.	25	25	—	—
Birmingham Borough: Winson Green . . .	1	10	—	1 (Egypt).
Bucks County . . .	6	23	—	—
Cambridge County . . .	—	6	—	—
Cardiff Borough: W.H.	52	—	—	—
Canterbury Borough . . .	2	9	1	—
Carmarthen County . . .	—	12	1	—
Chester County:				
Parkside . . .	6	10	—	—
Upton . . .	5	8	—	—
Croydon Borough . . .	9	34 (Army and Navy)		—

County and borough asylums.	Male staff.			Female staff.
	Army.		Navy.	
	Medical.	Other depart- ments.		
ENGLAND AND WALES —continued.				
Cornwall County . . .	—	32	—	—
Cumberland and West- morland County.	—	A consider- able number.	—	—
Denbigh County . . .	—	16	—	—
Derby County . . .	—	22	—	—
Devon County . . .	14	42	—	Matron, V.A.D.
Dorset County . . .	—	15	—	—
Durham County . . .	—	20	—	—
Exeter Borough . . .	—	2	—	—
Gloucester County . .	—	35	—	—
Hants :				
County . . .	5	40	2	—
Portsmouth Borough	—	23	5	—
Hereford County . . .	—	18	—	—
Herts County . . .	—	25	—	—
Hull Borough . . .	—	19	—	—
Ipswich Borough . . .	4	11	—	—
Kent County . . .	7	36	2	—
Lancaster County :				
Lancaster Moor . . .	—	91 (Service not stated)	—	—
Rainhill . . .	28	64	2	—
Whittingham . . .	11	81	4 (Service not stated, 10)	90 as proba- tioners.
Winwick: W.H. . .	70	40	—	—
Leicester :				Matron to base hospital.
County . . .	—	12	—	—
Borough . . .	—	22	2	—
Lincoln County :				
Bracebridge . . .	3	9	—	—
Kesteven . . .	—	7	1	—
London County :				
Banstead . . .	10	40	—	—
Bexley . . .	30	61	4	—
Claybury . . .	8	57	—	—
Colney Hatch . . .	16	32	1	1 (Red Cross).
Ewell Colony . . .	7	8	1	—
Hanwell . . .	—	43	2	—
Horton: W.H. . .	7	43	—	—
Manor . . .	—	4	—	—
London City Mental Hospital.	5	16	—	—
Middlesbro' Borough .	7	2	—	—
Middlesex County :				
Napsbury: W.H. . .	—	28 (Rest of staff in charge of hospital).	—	13 in W.H.
Wandsworth: Part W.H.	9 in W.H.	25	—	—
Monmouth County . . .	1	17	—	—
Newport Borough . . .	—	12	1	—
Newcastle-upon-Tyne Borough: W.H.	—	13	2	Rest R.A.M.C. in W.H.
Norfolk County: W.H.	—	39	2	—
Northumberland County	—	14	—	—
Notts County . . .	2	19	1	—

County and borough asylums.	Male staff.			Female staff.
	Army.		Navy.	
	Medical.	Other depart- ments.		
ENGLAND AND WALES —continued.				
Nottingham Borough . . .	3	17	—	—
Oxford County . . .	1	8	—	—
Plymouth Borough . . .	—	11	1	—
Salop County . . .	—	9	—	—
Somerset County :				
Norton Fitzwarren . . .	1	12	1	—
Wells . . .	—	19	—	—
Stafford County :				
Burntwood . . .	10	9	—	—
Cheddleton . . .	4	44 (1, E. S. Gadsden, died of wounds).		
Stafford . . .	6	26	—	—
Suffolk County . . .	3	27	—	—
Surrey County . . .	2	54	—	—
Sussex (East) County :				
Hellingley . . .	8	41	1	1 (V.A.D.).
Sussex (West) County :				
Chichester: W.H. . .	42	2	—	—
Warwick County . . .	9	23	—	—
West Ham Borough . . .	8	23	—	—
Wilts County . . .	1	32	—	—
Wight (Isle of) County	5	7 (1, O. Salter, killed)		
Worcester County :				
Barnsley Hall . . .	2	15	—	—
Powick . . .	1	15	—	—
York County :				
E. Riding . . .	10	6	—	—
N. Riding . . .	—	16	—	—
W. Riding :				
Menston . . .	1	33	—	—
Scalebor Park . . .	—	9	—	—
Storthes Hall . . .	2	16	—	—
Wadsley: W.H. . .	5	27	—	—
Wakefield . . .	—	60	9	1
		(Army and Navy Reserve)		(Red Cross).
York Borough . . .	4	9	—	—
SCOTLAND.				
Aberdeen :				
Royal Asylum . . .	7	6	—	—
City Asylum . . .	3	5	—	Asst. Matron, Alexandria.
Argyll and Bute Dis- trict.	—	14 (1 prisoner; 1 wounded)	2	—
Ayr District . . .	3	8	—	Asst. Matron (Matron, Red Cross Hosp.)
Banff District . . .	—	2	1	—
Dumfries :				
Crichton Royal . . .	7	38	—	3 Asst.

County and borough asylums.	Male staff.			Female staff.
	Army.		Navy.	
	Medical.	Other depart-ments.		
SCOTLAND—continued.				
Edinburgh District . Bangour Village : W.H.	3	31	—	Matrons. 3 Sisters.
	(The whole Nursing Staff is now engaged in military nursing.)			
Royal Asylum, Morn-ingside.	9	31	—	4
Elgin District . . .	—	3	—	—
Glasgow : Royal Asylum, Gart-navel.	7	13	—	3
District Hospital, Gartloch.	8	11	1	1 Asst. Mat-ron, Hospital in France.
District Mental Hos-pital, Woodilee.	3	30	1	2 Asst. Mat-rons nursing in Serbia.
Fife and Kinross District	—	5	6	—
Govan District . . .	—	13	—	—
Haddington District .	—	6	—	—
Inverness District .	2	9	—	—
Lanark : Kirklands . . .	—	4 (1 killed in action)	—	—
Hartwood . . .	1	16	—	—
Midlothian and Peebles District.	—	20	—	1 Matron.
Montrose District .	—	8	2	1 Nurse.
Perth District : Murthly	1	4	—	—
James Murray Royal Asylum.	4	7	—	2 Asst. Matrons.
Roxburgh District : Melrose	—	4	—	—
Stirling District : Larbert	1	24	—	3 Asst. Matrons.
IRELAND.				
All District Asylums .	8	47	—	1 (Red Cross).

This table is only approximately correct, as in some cases full particulars were not given or were not available. The returns are only up to July last.

From above figures the totals for each country work out as follows :

	R.A.M.C.	Other army departments.	Navy	Unknown.	Nursing staff.
England and Wales	468	1634	31	287	6
Scotland	56	312	13	—	22
Ireland	8	48	—	—	1
Total for United Kingdom.	532	1994	44	287	29

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These totals do not include a considerable number of attendants and nurses who are retained as orderlies or nurses in asylums which have been converted into war hospitals, and the numbers of whom were not stated in the returns.

The grand total of asylum employes in the United Kingdom, including medical officers, who have joined the Services in one or other capacity is, roughly, 3000, to which must be added those not included in the returns, referred to in preceding paragraph.

PROFESSIONAL CLASSES (WAR SERVICE) REGISTER.

The following letter has been received by the Secretary of the Association :

BOARD OF TRADE,
LABOUR EXCHANGES AND UNEMPLOYED INSURANCE DEPARTMENT,
QUEEN ANNE'S CHAMBERS,
WESTMINSTER, S.W.

SIR,—I am directed by the Board of Trade to draw your attention to the fact that at the present time many professional and University women in all parts of the country who desire employment have registered their names with this Department; amongst these are qualified teachers, sanitary inspectors, welfare workers, private secretaries, women with experience in organising business enterprises, or political and philanthropic societies, dispensers, and analytical chemists, and others.

I am to inform you that these registrations will be dealt with by an expert staff of women, and I am to suggest that, should you desire at any time to obtain the services of educated or professional women, you should communicate with this Department, and they would be glad to assist you by submitting applicants with good qualifications for the particular type of work desired.

As you are no doubt aware, no fees are charged by the Department.

I am, Sir,
Your obedient Servant,
C. F. REY.

The Secretary,
Medico-Psychological Association
of Great Britain and Ireland,
11, Chandos Street,
Cavendish Square, W.

EXAMINATION FOR NURSING CERTIFICATE.

SOUTH AFRICA.

List of Successful Candidates.

FINAL EXAMINATION, MAY, 1915.

Pretoria.—Nellie A. Hall.

Port Alfred.—Emily A. Woods (with distinction), Alice H. Hunt.

Valkenberg.—Katherine M. de Villiers, William F. Munyard.

PRELIMINARY EXAMINATION, MAY, 1915.

Bloemfontein.—Annie Roe, Petrus J. Meyer, Walter J. Howard, Andries J. Rheeders.

Grahamstown.—Agnes E. Rice.

Pietermaritzburg.—Thomas H. Ellender.

Port Alfred.—Thomas H. Timm, John Coleman, Henry E. Cholwick, Desires C. Minoi, Nicholas G. Goosen, Isaac O. Slater, Martha C. Loubser.

Pretoria.—Alphonso F. S. Meintjes, Johann C. Van der Werff, Laura Tomes, Katherine M. Groenewald, Ida M. Patrick, Agatha W. Parsons, Johann C. Truter, Elizabeth M. Avent, Margaret Lynn.

Robben Island.—Blanche Schutte, James E. Curry, William J. Clarke, Thomas Monahan, George F. Haupt, Robert G. Williams, Thomas Paxton, Bailey Jordaan, John Jones, Carl Wilhelm de Seler.

Valkenberg.—Zena M. Reyneke, Maria M. Nutt, Nellie E. Westley, Cuthbert Horsfall.

OBITUARY.

THE LATE SIR JAMES M. MOODY.

Sir James Matthew Moody was born in the county of Tyrone, Ireland, in 1853. His father was a Fleet-surgeon. He was educated at King Edward's School, Oxford, and afterwards entered as a medical student at St. Thomas's Hospital. In 1874 he gained the qualification of M.R.C.S.(Eng.), and four years later the diplomas of L.R.C.P. and L.M.(Edin.). He acted for some time as Clinical Assistant at St. Luke's Hospital, and was then appointed Assistant Medical Officer to Brookwood Asylum, Surrey, where he remained for six years. In 1882, when only twenty-nine years old, he was appointed Medical Superintendent of Cane Hill Asylum, which had just been built by the Surrey Asylums Committee, but in 1889, when the London County Council was created, it was bought by them. Sir James Moody continued in his office, and worked there until his death—a period of thirty-three years.

He was an able administrator, and his advice was often sought by those interested in lunacy. As an instance of this, he was appointed a few years ago by the Government of Newfoundland to report on the administration of lunacy in that colony. On two occasions he has been offered the post of Commissioner in Lunacy, but declined it. He was courteous in manner, and proud of the asylum over which he so well presided. He received the honour of knighthood in 1909 in recognition of the great advance which he initiated in the care and treatment of the insane. His influence as an administrator is proved by the fact that fifteen of his medical staff have been appointed medical superintendents of other asylums, and one has been appointed a member of the Board of Control. Sir James was a good sportsman, a member of the Caravan Club and of the Japan Society, an authority on bees, and a collector of curios.

His death was not quite so sudden as has been represented. Although his health had been indifferent for some time, he only took to his bed about a week before his death. He was assiduously attended by Dr. Littlejohn, the senior assistant medical officer, and by Dr. Turner, a local practitioner in the neighbourhood. The advice of Drs. Hale White and Hawkins, of London, was also obtained. A great change took place on Monday, September 20th, and he died quite peacefully in the evening at the age of 62. His death was a great shock to the patients and staff, which number nearly 3000. He was much appreciated by them, and they will mourn him deeply.

Sir James married in 1885 Alice Harriet, daughter of the late Alfred Blackburne Frend, who survives him, and for whom great sympathy will be felt by his many friends in her bereavement.

The funeral took place on Friday, September 24th, and was conducted by the Rev. I. C. Crawford, Chaplain of the asylum. The first part of the service was held in the Asylum Church, and during the assembling of the congregation Mr. George Price Hiscox, the organist, played, "O rest in the Lord," "Twilight," and the funeral march from "The Story of Say'd." At the conclusion of this service the "Dead March" in "Saul" was impressively rendered, the congregation, which numbered about 400, standing.

The chief mourners were Lady Moody (widow), Sir John and Lady Moody (brother and sister-in-law), Miss Beatrice Frend (sister-in-law), Mr. Laurence McConaghey (nephew), and Mr. H. Frend (brother-in-law). In addition to these there were present the medical staff, the matron, the assistant matron, and the inspector, a large number of visitors, representatives of different departments of the asylum, head attendants, head nurses, attendants, nurses, domestic staff, and some male and female patients.

Among the visitors should be mentioned the Right Hon. John Burns, M.P., three members of the Board of Control, members of the London County Asylums

and Mental Deficiency Committee, the Medical Superintendents of nearly all the other London County Asylums and various County Asylums, Dr. Steen, the Acting General Secretary of the Medico-Psychological Association, and Miss Vickers, representing the Mental After-care Association.

The first part of the service being ended, a procession was formed which walked slowly through the grounds of the asylum to the asylum cemetery, where the concluding part of the service was held. There with appropriate ceremony the body of Sir James was committed to the ground, not far from the asylum where his chief life's work had been so well performed.

Requiescat in pace.

F. B.

DR. ARCHIBALD ROBERTSON DOUGLAS.

We regret to have to record the death of Dr. Douglas, late Medical Superintendent of the Royal Albert Institution, Lancaster, which occurred with almost tragic suddenness on August 26th. The following appreciative notice is taken from the *Lancaster Guardian*:

"Dr. Douglas, who was only 47 years of age, was a Scotsman, but spent his youth in the neighbourhood of Tyneside, receiving his education in Madras College, St. Andrews, and the Newcastle School of Medicine, and at Edinburgh. His first appointment was that of resident surgical assistant at the Royal Infirmary, Newcastle, and he also held the appointment of registrar and clinical assistant at the Newcastle Throat and Ear Hospital; but throughout his career he has devoted special attention to mental diseases, and for a time held the position of resident clinical assistant at Dunston Lodge Asylum, Gateshead, and that of assistant medical officer at the East Riding Asylum, Beverley. With the exception of a period of two years, when he acted as deputy medical officer at Portland Prison, Dr. Douglas has been officially connected with the Royal Albert Institution since November, 1893, when he was appointed assistant medical officer, the senior medical officer at that time being Dr. Telford Smith. When the latter resigned his position in November, 1899, Dr. Douglas was appointed resident Medical Officer; and subsequently, when the death of Mr. Diggins (the late Principal and Secretary) in May, 1905, necessitated a change in offices, Dr. Douglas became Medical Superintendent, a position he has filled with conspicuous ability during a particularly arduous and trying time. During his tenure of office many important developments have taken place at the Royal Albert, the chief being the erection of the Ashton Wing for the accommodation of epileptic and feeble patients; the provision of the James Diggins Memorial Reception House, which enables the classification of the patients to be carried out with a greater degree of efficiency; and the initiation and development of the Farm Colony system, under which provision is made for forty patients. With an extensive practical experience of the treatment of all kinds of mental diseases, Dr. Douglas combined a marked ability in organisation and administration which has tended in no small measure to enhance the high reputation the Royal Albert has from the first maintained, and enabled it to be recognised as one of the leading institutions for the care and education of the feeble-minded in the country. His relationship with the staff was always most cordial, his geniality, kindness, and consideration endearing him to everyone with whom he was brought into contact.

"Dr. Douglas always emphasised the fact that the Royal Albert was an institution for the training of the feeble-minded, and the development of the educational work of the Institution, not only in the schools but in the Herbert Storey workshops, had his fullest sympathy and constant encouragement, the introduction of many new features which have had a beneficial effect being largely due to his earnest desire to secure for the afflicted people under his care the fullest advantage that systematic industrial training could bring about. During what may be termed the transition period which led to the passing of the Mental Deficiency Act in 1913, Dr. Douglas was more than once requisitioned to give evidence before Parliamentary Commissions, and the changes involved by the Act, which brought the Institution under the authority of the Board of Control, necessitated a great amount of arduous work, most efficiently and successfully performed.

"Outside his work for the Royal Albert, Dr. Douglas had many interests. He

was a lecturer to the St. John's Ambulance Association, coadjutor-examiner for the nursing certificate of the Medico-Psychological Association, vice-president of the Asylum Workers' Association, and vice-president in 1910 of the Section of Psychology and Neurology of the British Medical Association. Though not a voluminous writer he has contributed to medical and other journals several papers of importance upon the mentally defective and kindred subjects. A man of great amiability, he made many friends, by whom his untimely death will be sincerely regretted."

CORRESPONDENCE.

To the Editor of the Journal of Mental Science.

AN AID TO RECRUITING.

SIR,—The male attendants of military age employed in asylums have as a class not been backward in their duty to their country. Many of them enlisted at the beginning of the war, being encouraged to do so by the loyal attitude of Asylums Boards and Committees as regards pay, etc., and the vacancies created by these absentees have since been largely filled by men who are ineligible for military service. There are still, however, at the present time very many able-bodied young men employed as attendants on the insane. The presence of some of these is necessary, but the number required can be considerably reduced by the substitution of female nurses, especially in place of those attendants engaged in nursing the sick in the male hospitals and male infirm wards of asylums.

Fifteen years have now elapsed since the experiment of employing women on a large scale to nurse male patients in an asylum was tried in Scotland. All that was then said as to the advantages of female nursing for insane men, under certain limitations, has since been proved true by many observers, and the fears of the early opponents of this system have been found to be negligible, for the dangers that they prophesied have by forethought and care been avoided. The system is now, from the practical experience they have gained of its benefits, very strongly advocated by the Scottish Board of Control, and their judgment can be accepted without reserve. It has been all but universally adopted by the Scottish asylums.

As there is every indication that all eligible males who can be spared will soon be wanted for our military forces, I take this opportunity of directing the attention of the Medical Superintendents and the members of Boards and committees of asylums in England to this system, as it has up till now scarcely been introduced into English asylums. Not only will they be doing a patriotic duty by introducing these female nurses to enable more of their male attendants to enlist, but they can be assured that they will at the same time be adding to the comfort and well-being of the sick and infirm male patients under their charge.

I am, etc.,

THE ROYAL ASYLUM,
MORNINGSIDE,
EDINBURGH;
July 21st, 1915.

GEORGE M. ROBERTSON, M.D.,
Physician-Superintendent.

NOTICES BY THE REGISTRAR.

DATES OF NURSING EXAMINATIONS.

Preliminary examination . . . Monday, November 1st.
Final Examination . . . Monday, November 8th.

Schedules must reach the registrar *not less than four weeks* prior to the date of Examination. For further particulars apply to Registrar, Dr. Alfred Miller, Hatton Asylum, Warwick.

NOTICES OF MEETINGS.

Quarterly Meetings: November 23rd, 1915, London; February 17th, 1916; May 16th, 1916.

The Divisional Meetings are proposed as follows:

South-Eastern Division.—October 6th, 1915; April , 1916.

South-Western Division.—October 22nd, 1915; April 21st, 1916.

Northern and Midland Division.—October 7th, 1915; April 27th, 1916.

Scottish Division.—November 19th, 1915; March 17th, 1916.

Irish Division.—November 4th, 1915, Royal College Physicians, Dublin; April 6th, 1916; July 6th, 1916.

N.B.—The Editors will be glad to receive contributions of interest, clinical records, etc., from any members who can find time to write (whether these have been read at meetings or not), for publication in the January number of the Journal. They will also feel obliged if contributors will send in their papers in good time, if possible.

THE LATE DR. EDGAR FAULKS.

Just as this number was going to press we have heard with regret of the death of Dr. Edgar Faulks, Senior Assistant Medical Officer at Bexley, who has been killed in action, thus adding another name to that sad but glorious death-roll of those who have sacrificed their lives, most of them young lives full of promise, in the service of their country. We are obliged to reserve for a future issue a more lengthened notice of our late esteemed colleague. We should like, on the part of the Members of the Association, to tender to his family an expression of our sincere sympathy in their bereavement.

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